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Quite a dilemma was produced a little while ago on the western circuit by the introduction of the word "dry-nurse," in an address to the court. This bewildered the judge, who asked if a dry-nurse was a nurse who dried babies after they had been washed. That solution did not suit the learned counsel, who, after some hesitation, said he thought it meant a nurse who was not addicted to drinking. Nobody seemed to know what the term really meant, though several more guesses were made, the last of them that a dry-nurse was one who could not amuse children.

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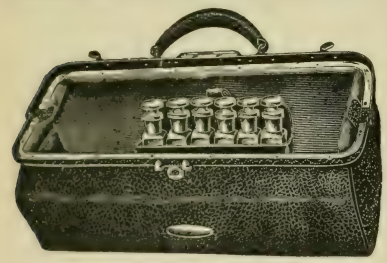

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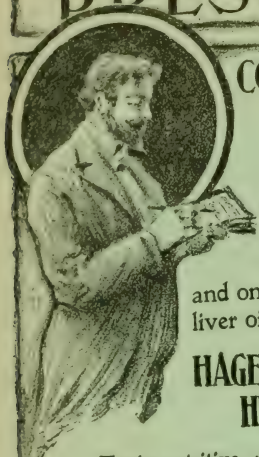

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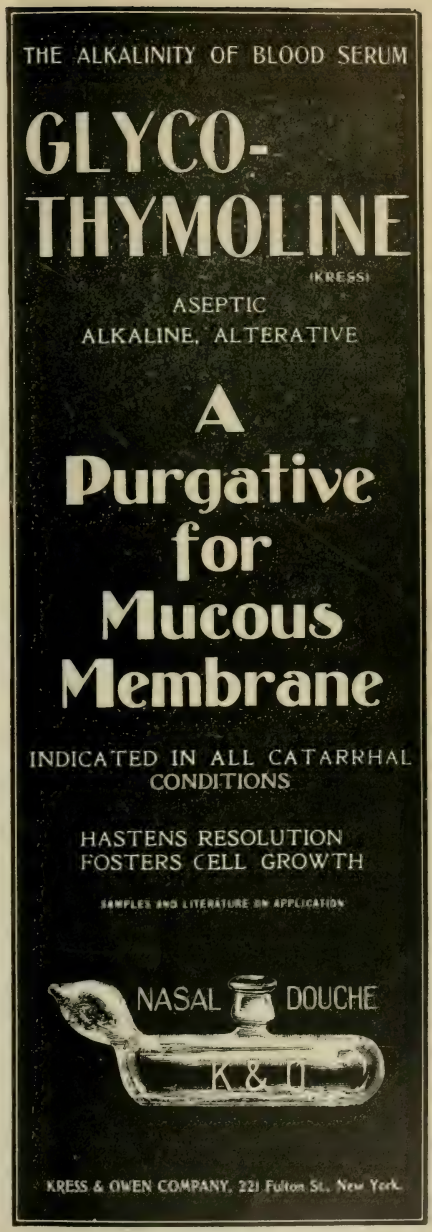
The Cocain Habit.

It appears that the cocain addiction is, thus far, more a particular vice of the lower classes, but as such it seems to be spreading all over the world. According to Anglo-Indian papers it has become so prevalent among the street boys and school boys in Calcutta that the government has had to take the matter up with the idea devising means for checking the evil. While as yet it is confined to the classes mentioned, it is feared that it will spread to others. In our own country it is particularly a vice of the Southern negro, and some States and muncipalities have already legislation on the subject. The policy in India as regards opium has been thus far for revenue only, and it will be interesting to observe what will be done as regards cocain.—*Exchange.*

Pereneal Laceration.

The method suggested by Norfleet is the use of anesthesia during stormy pains. As the second stage comes on, give the patient a whiff or two of chloroform and when the head comes down enough to separate the vulva, give the chloroform to a reliable assistant and watch. When the occiput is well hooked under the pubic arch, the pain brings the extending head so far forward that the fingers feel the forehead slip under their control. At once give the word for chloroform, and with the help of the left fingers on the child's occiput hold the head still until relaxation takes place; then slowly shell the head out by pressure on the forehead. Take plenty of time and allow the perenium to stretch as much as possible. As soon as the head is fairly out, do away with the chloroform altogether.



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The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

XLVIII. CHARLOTTE, N. C., JANUARY, 1902. 1

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EDITORIAL.

THE REMUNERATION OF PRESIDENT McKINLEY'S DOCTORS.

We notice that this subject is being discussed in some of the newspapers, and we trust it will be taken up by Congress at an early date and the accounts satisfactorily adjusted. Congress surely does not need to be reminded that these services were rendered to Mr. McKinley not as an ordinary citizen, but as President of the United States. The obligation is a National one and should not be a charge against the martyred President's estate. In the case of President Garfield, this obligation was recognized by Congress, but if our memory serves us, there were some unnecessary discussion and some rather unseemly haggling over the settlement. It is not the part of outsiders to determine the value of these services or to suggest the size of the fees, but it is evident that these latter should be proportioned to the eminence of the patient, the importance of these services, the standing of the attendants, and the responsibility of the case. It is not inappropriate or indelicate to call attention to the fact that the mere risks to professional reputations involved in such a momentous and critical case are certainly as great as, if not greater than, any risks assumed by any proffessional men in any other circumstances whatever. From the legitimate business standpoint, such risks are not among those which physicians and surgeons can afford to assume for mere sentiment or should be called upon to meet without ample compensation.

The medical conduct of the lamented President's case was conspiciously free from selfish, jealous, unworthy motives. The physicians and surgeons performed a grave public duty without a taint of self-seeking or of vainglory. It is appropriate now that they should be well remunerated by the American people.

We regard the above, copied from an exchange, as a very clear statement of this much-discussed question, giving as it does what would seem unanswerable reasons for the contention of the present surgeons that their fees should be paid by the National goverment and not by the estate of the deceased.

THE MEDICAL PROFESSION.

It is not always that the lay-press, or for that matter, the great army of patients, show a thorough appreciation of the higher attributes of the medical profession, for in this age of commercialism, our profession has not entirely escaped the prevailing taint. However, what the Cincinnati Post says of the medical men of that city shows it to be a notable exception to the foregoing remark, and what is more to our credit, it is far truer than most eulogies.

"When there is light, pure water, pure air and sanitary sewers in or connected with every school-house in Cincinnati, there will be less sickness—less business for the doctors. The men who have endorsed the Post's investigation are working earnestly and honestly against their own financial welfare. Why? Because there isn't one doctor in a thousand who isn't laboring to a large extent for the good of humanity. They have ambition to be successful as a spur and also a desire to be of use to the community. They do not work for money alone. The cry for universal cleanliness comes from the doctors. They are in favor of every idea, invention, thought or act that will prevent disease and suffering and add to the physical comfort of the people. There isn't a practical move for the physical betterment of mankind that does not find them ready to co-operate and lead when able and strong leaders are needed. Above and beyond that lies the fact that there is little selfishness in the medical profession. The physicians of Cincinnati, as a body and individually, are working for the health of the people, and it is in many instances a labor of love."

TOBACCO AS A DESTRYOER OF MANKIND.

The various causes of temperance not infrequently suffer more from the indiscreet zeal and unsubstantial assertions of its advocates than from all the assaults of its enemies. An illustration in point is found in a recent editorial in the *St. Louis Hospital Bulletin,* dealing with the tobacco habit. After quoting an extract, the effect of which is to show that tobacco must have properties peculiarly adapted to the propensities of our nature to have surmounted the just repugnance to its odor and taste; the article in question proceeds to count the innumerable retributions which an outraged nature inflicts upon that unfortunate class of our citizens who are continually puffing smoke into the face of their fellow-man and spitting tobacco juice upon the Creator's foot-stool. That double-edge sword, medical statistics, is handled very much in the same manner as a

poet tells us man rushes in where more celestial beings fear to go. For instance:

"Poisons, such as tobacco, whisky, beer, opium, arsenic and strychnine, kill more than a million people annually in the United States. Among these poisons tobacco takes a high rank; and it is now believed that more deaths are traceable to the poisonous effects of tobacco than any other poison known. It is a well-known fact that nicotine is the active principle, or poison, of tobacco, and that it is more deadly poison than strychnine, opium, morphine or arsenic."

And the following: "It is a well-known fact, however, that about 90 per cent. of those who are stricken with paralysis, or who suffer with kidney disease, insomnia, dyspepsia, rheumatism and extreme nervousness are users of tobacco in some form." Which could be quoted just as well as indicating that tobacco does not render its habitues immune to the ordinary diseases of the race. As regards the cigarette habit, the long-exploded assertion is made that the tobacco in cigarettes is soaked in nicotine or saturated with opium, stramonium and belladonna, and the wrappers containing arsenic; this in spite of the fact that repeated examinations in the hands of competent people has demonstrated the absence of any such substances. It is equally difficult to believe "that 95 per cent. of those who use tobacco in any form are also addicted to the use of whisky, beer, or other alcoholic stimulants." Or that "ninety-five out of every hundred persons who use tobacco in any form suffer with indigestion, constipation, nervousness, headache, heartburn, insomnia, color blindness, epilepsy, paralysis, bronchitis, rheumatism, asthma or catarrh."

The evil effects of tobacco, used intemperately, or in certain cases even moderately employed, are so well-known not only to the profession, but to the laity that it would seem absurd to attempt to make a veritable Pandora's box of evil out of so well-understood a subject by an impassionable array of statistics and a catalogue of diseases. N C Med J (as) 49 : 3, #1 Jan 1902.

A Medical School to be Established in Raleigh, N. C.

Action of special interest and importance was taken by the trustees of the North Carolina State University, establishing the State Medical University to be located at Raleigh.

This action is the outcome of mature deliberation on the part of the management of the State University in conjunction with some of the best equipped medical men of the State.

For some years the University has been giving a medical course, but not graduating students. Now the trustees of the University have decided to prepare a place where medical education can be finished and diplomas issued.

While it is an advanced department of the University, the State Medical University is very properly to be located in Raleigh. This is proper for many reasons. It is the capital of the State, has established hospitals, eminent medical ability deeply interested in the enterprise. Such a move will not only be a great convenience and cost the medical students of the State less than going elsewhere; but will be a matter of State pride.

Dr. Hubert A. Royster, of Raleigh, has been elected dean of the State Medical University.

The Carolina Medical Journal.

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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession re solicited for publication.

ORIGINAL COMMUNICATIONS.

The Food Value of Alcohol : the Chemico-Physiological Evidence.

By J. W. Long, M. D., Salisbury, N. C.—Read before the Rowan County Medical Society, October 14, 1901.

There could perhaps be found no one so reckless as to claim that alcohol used in excessive quantities is not destructive to health and life, yet the idea is firmly fixed in both lay and professional minds that alcohol used in moderate quantities is a wonderful stimulant—quite indispensable in the treatment of a multitude of diseases, even amounting to a specific in the management of certain affections; while quite a number of scientists, with, of course, a large following among the laity, go still further and claim that alcohol is not only a stimulant and a relish, but because of certain virtues it is supposed to possess, it should be classed among the foods.

Many years ago an eminent German chemist, Justus von Leibig, in his "Letters on Chemistry," called alcohol a "food and stimulant" when taken in moderate quantities, and because of its chemical formula and rapid oxydation, he classed it with the "fuel foods."

This idea of Leibig's, endorsed as it was by the Dublin School, Todd, the leading London physician, Austin and a host of imitators, was accepted by both physician and general public as a proven truth. So thoroughly established was the doctrine that alcohol was a valuable food and even a necessity, that as late as 1840 life insurance companies charged total abstainers an extra premium of 10 per cent. or more.

I recall with perfect clearness the teachings of my old master in the Principles and Practice of Medicine, Thos. L. Madden, at the Uni-

versity of Nashville and Vanderbilt University; he taught 20 years ago that "alcohol is a force producing food." And following the lead of Leibig and the Dublin School, he urged the importance of giving that food (alcohol) in all asthenic diseases. I remember with what special emphasis he advised its use in typhoid fever, not simply to sustain the failing heart, but because "alcohol is a *force producing* food."

As the value of alcohol both as food and medicine depends upon its chemico-physiological action, we will study its behavior along these lines and compare it with the well-known properties of established food.

That we may have a proper standard of comparison, let us notice:

1. *What is food?* Food is hard to define. All definitions so far given are open to some objections. Foster's Encyclopedic Medical Dictionary does not undertake to define the word. Foster's Physiology makes the same omission. The Standard Dictionary says it is "that which is eaten or drunk for nourishment; any substance that being taken into the body of animal or plant serves through organic action to build up normal structure or supply the waste of tissue."

Voit[1] defines food as any substances that replaces or spares any necessary material of the body.

It is common knowledge that the organic foods are the proteids or nitrogeneous substances, such as lean meat, the carbohydrates or sugar and starch, and the fats; while the inorganic foods embrace water, saline or mineral bodies, and perhaps oxygen.

These all replace similar substances in the body, and some of them as the fats and carbohydrates, possess the property of sparing the proteid tissues.

The uses of food are to generate heat, promote cellular activity, furnish material for tissue growth and to replace tissue waste—in other words, to nourish the body.

It might be noted in passing that the best type of the ideal food—milk, contains all of the organic and inorganic substances mentioned above except oxygen, which is, of course, supplied from the inspired air, but it contains no alcohol.

But let us examine the evidence and see both where to place alcohol and what virtues we may reasonably attribute to it.

2. *Does alcohol meet the requirements of a food?* Understand, please, that when we mention alcohol we refer only to ethyl alcohol, since it is the kind commonly used, and is the least harmful of all the alcohols, also that by alcohol is meant all forms of alcoholic liquors, alcohol or the "toxin of the yeast germ," being the active principle of them all.

According to Voit's definition, which is perhaps one of the best, it must be shown that alcohol replaces a similar substance or spares by its metabolic action some of the normal tissues of the body to entitle it to be classed as a food.

Since alcohol is not a constituent of the normal body, it cannot replace itself, it must therefore depend upon its ability to spare the native tissues to establish its claim as a food.

The chemical formula of alcohol being C^2 H^6 O, if a food at all, it belongs with the carbohydrates. This agrees with Liebig's classifica-

1. Hewes, Quarterly Journal of Inebriety, October, 1900, page 409.

tion, and is the one generally accepted.

As has already been stated, the carbohydrates not only replace themselves in the body, but they spare the proteid tissues. This sparing of the proteid tissues is done in several ways, notably, (1) by contributing largely to the generation of body heat by oxydation; (2) by preventing the undue breaking down of nitrogenous tissues or nitrogenous waste.

Does alcohol do either?

II. ALCOHOL AS A FUEL.

Unquestionably alcohol is oxydized in the system, since when taken in moderate quantities, 40 to 70 grams in 24 hours, only from 2 to 5 per cent. escapes from the body unchanged. Combustion by oxydation necessarily produces heat, which in the case of alcohol, is estimated in round numbers at 9,000 calores or heat-units to the gram of alcohol. A calore or heat-unit is heat sufficient to raise the temperate of one gram of water one degree C.

Other things being equal, the heat generated by the oxydation or burning of alcohol would certainly be of value in the physical economy; but just here appears an item on the opposite side of the ledger. One of the pronounced results following the injestion of alcohol is increased heat radiation, due to the dilatation of the superficial blood vessels, thus bringing a larger volume of blood to the surface. This dilatation is seen in the flushed face after only a small amount of alcohol has been taken. The increased heat radiation is also shown by the lowering of the body temperature, especially after large doses of alcohol have been taken. The net result, then, of giving alcohol to warm the body is a loss and not a gain to body heat.

Practically this rule holds good, for every one knows that a drunken man will freeze quicker than a sober one, and it has been repeatedly demonstrated that it is dangerous to use alcohol in extremely cold climates. It is well known that Nansen and Andre expressly forbade taking alcohol among the stores for their arctic expeditions.

It might very pertinently be asked: If alcohol causes more heat radiation than it develops, why is it not a suitable antipyretic? It is not a safe antipyretic for the reason that to get an appreciable antipyretic action it must be given in quantities that are destructive to the protoplasm of the nervous system, as will be noticed presently.

We cannot be perfectly candid touching this point without noticing the views of Professor Atwater, who is perhaps the most able advocate of the doctrine that alcohol is a food, since the days of Liebig.

Atwater has made some very carefully conducted experiments which he details in Harper's Magazine for October and November, 1900.

He measured the potential energy of the food given and the amount of heat-radiation, with the subject at rest, also while engaged in active exercise on a stationary bicycle. Then he repeated the experiments with a part of the non-nitrogenous food substituted by alcohol. His conclusions were that there was no greater heat radiation with alcohol than without.

One or two objections may be entered to Professor Atwater's conclusions. First, he employed a man who was in the habit of using alcohol in moderate quantities, and alcohol, like all active protoplasen poisons, soon produces immunity against the usual dose. Second, his results are at variance with those of other competent observers. Third, he says himself, that while increased heat radiation is very small, almost imperceptable after small doses, yet after large doses, the heat radiation bcomes great, even dangerous, especially if the person is subject to great cold.

Even though it could be demonstrated that heat radiation is not increased by alcohol, still it would be a mooted question as to whether or not alcohol is a food, since every substance that is oxydized in the body generates heat by chemical action; and there are many such substances that clearly are not foods, such as glycerine, besides certain virulent poisons, including some of the toxins; indeed it is nature's way of getting rid of obnoxious substances—to burn them up.

Besides it can be claimed that alcohol is oxydized in the system only when taken in moderate quantities, the surplus being eliminated by the lungs, kindneys, etc.; the whiskey-laden breath of the intoxicated man being in proof.

III. ALCOHOL AS A TISSUE SAVER.

It seems that physiologists take the elimination of nitrogen as the standard of tissue waste. The normal man has what is called a "nitrogenous equilibrium," which varies within certain units. If less food than is needed is taken there is a demand made upon the tissues of the body, which is shown by the increased amount of nitrogen eliminated. Now the question for us to determine at this point is: Does alcohol increase or diminish nitrogenous waste?

Prior to the last decade medical men the world over believed that alcohol was a tissue saver, that there was less wear and tear of nitrogenous tissue while using alcohol than without it. Even as late as 1888, Binz[1], reporting for the committee on alcohol to the Congress for Internal Medicine, said there was only one thing regarding the action of alcohol to which they all agreed, to-wit: that alcohol diminished the output of nitrogen.

Almost every experiment since then, and some before that time, have given just the opposite results.

Roseman[1] has shown that all research on this subject done prior to 1890 is practically valueless because the observers worked with insufficient data. The only experiments of special scientific value done since that time may be quickly reviewed.

Van Noorden[3] experimented with three persons. On giving alcohol two lost nitrogen, and one maintained his nitrogenous equilibrium, the latter receiving a rich proteid diet.

Stromm[4] found as a rule an increased loss of nitrogen under the use of alcohol. Exceptions were noted in some cases.

Schoneseiffen[5], after giving a re-

1. Madden, American Medicine, May 4, 1901, page 210.
2. Hewes, loc. cit.
3. Kassowitz, Quarterly Journal of Inebriety, January, 1901, page 6.
4. Hewes, loc. cit.
5. Kassowitz, loc. cit.

duced amount of food to cause a slight loss of albumen or nitrogen, gave twice as much alcohol as it would take to replace the calories represented in the deficit of food. If these calories had been replaced by carbohydrates there would have been a stirring up of nitrogen. No such thing occurred under the use of alcohol, even the daily loss of nitrogen was not stopped.

In this instance, at least, alcohol did not demonstrate any albumen-saving properties.

Schmidt[1], after establishing a nitrogenous equilibrium added alcohol enough to have caused a stirring up of nitrogen. The result was a decided loss of body albumen.

Atwater[2] reports two series of experiments to determine the effects of alcohol on nitrogen waste. In the first series he used a man who "had been accustomed to the occasional use of alcohol in moderate quantities." After the experiments with this man, he said while in some instances there was increased tissue waste, he did not feel authorized in saying that alcohol exerted any specific influence either way.

In his second series Atwater employed a total abstainer, and he says: "In this case there was an evident increase in the matabolism of nitrogen (i. e., loss of nitrogen) during periods of three days each, when alcohol was given."

In reference to Atwater's first series of experiments with the man who had used alcohol "in moderate amounts," it may be recalled that all of the protoplasm poisons, as morphine and cocaine, soon establish a tolerance in the system, so that small or moderate amounts produce no appreciable effects.

The same thing is true of alcohol, the system adjusting itself to its daily dose of poison, as everyone knows, hence the maintenance of the nitrogenous equilibrium in the moderate user, when only moderate amounts are taken.

Madden[1] says: "I have been unable to find a single case in which experiments were carried on with a non-user of alcoholic beverages, and the nitrogen metabolism, estimated by an examination of the nitrogen excreted, in which the exhibition of alcohol has not been attended by an increase in the loss of nitrogen."

Perhaps the most convincing experiments are those by the Japanese physiologist, Miura[2] on himself, under the direction of Von Noorden. Miura first established a nitrogenous equilibrium, then replaced a part of the carbohydrate food with alcohol. This he did three times, and in each instance there was a notable increase in the nitrogen eliminated. He then withdrew the alcohol and returned to diet which formerly had preserved his nitrogenous equilibrium, but found that the nitrogenous waste continued for several days.

Miura, in another experiment, left out the same amount of carbohydrates that he omitted during the alcohol period, but in this instance took no alcohol. He now found that there was nitrogenous waste, of course, but it was less than when the carbohydrate deficit had been replaced by alcohol.

1. Kassowitz, loc. cit.

2. loc cit

1. loc cit.

2. Madden, loc. cit.

Miurna very justly reasoned that alcohol did not prevent the breaking down of albumen or proteid tissue, but rather increased it; in other words, that alcohol is not an albumen saver, but is a proto-plasm poison.

We may best understand the effacts of alcohol on the nervous system by a rapid review of

IV. THE HISTOLOGY OF NERVE CELLS.

Essentially a nerve cell consists of a mass of protoplasm containing a nucleus and a nucleolus, with fine nerve fibrils systematically distributed through the whole and reaching out into the numerous processes which are merely prolongations of the cell. These processes are of two kinds, (1) dendritic prolongations, which are numerous and branch repeatedly. Oppenheim says: "According to the latest conceptions they do not join the processes of other cells or of the nerve fibres."[1] (2) The axis-cylinder process which becomes the axis-cylinder of a meddulated nerve usually. These processes are clearly shown in Figure I.,

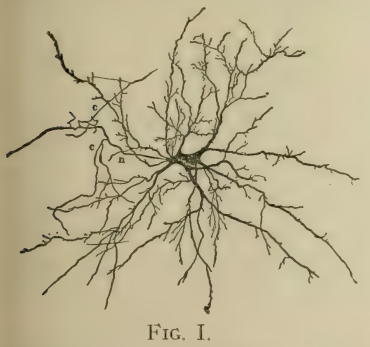

FIG. I.

taken from Oppenheim's recent work.

1. Diseases of the Nervous System, page 93.

The nerve cell, or neuron, as it is called, is the nerve unit of the whole nervous system, and when carefully analyzed, seems to be a veritable living animal, since it appropriates food from the circulation, generates energy of various kinds, stores up reserve force, etc.

By means of Nissl's method of staining the protoplasm of the neuron is seen to be arranged in definite groups or rows of granules. These granules stain readily, hence are called chromatophilous or Nissl's bodies.

FIG. II.

FIG. III.

The chromophilic bodies may be seen in Figure II., after Edinger[1]. Riley[2] states that these chromophlic bodies consist of highly complex and elaborated substances transformed by the cell from the food substances carried thither by the circulation and are supposed to be the food matter for the cells.

From this stored-up food the cells generate nervous energy or vital force. In other words, the chromophilic bodies are the storage batteries of the nerve cells. When they are exhausted the cells can no longer perform their function until a fresh supply of pabulum is taken from the blood. Thus it is seen in examining the cells of the lower animals immediately after great fatigue that the chromophilic bodies are lessened in number and size, and the cell itself

1. Oppenheim, loc. cit.

2. Quarterly Journal of Inebriety, October, 11, 1900, page 431.

is smaller and irregular in outline.

By means of Nissl's method of staining, we are enabled to study the diseases of the nerve cells due to poisoning, diphtheria, typhoid fever, elevation of temperature, etc.[1]

Briefly stated, the effects of such poisons as the toxins of diphtheria, typhoid fever, hydrophobia, etc., on the nerve cells are a breaking down and scattering of the chromophilic bodies. This is clearly shown in Figure III., after Bailey.[2]

V. EFFECTS OF ALCOHOL ON THE NERVOUS SYSTEM.

Touching the effects of alcohol upon the neurons, it has been shown by experiments in the hands of Stewart,[3] of Clarke University, Mass., also by a German investigator by the name of Dehio, that alcohol given to rabbits causes degenerative changes in the nerve cells just in proportion to the amount of alcohol given, even moderate quantities, producing pathological changes in the chromophilic bodies within 50 minutes. These lesions were similar to those produced by the toxins mentioned above, namely a dissolving and scattering of the chromophilic bodies.

In the brain cells of man dying from acute alcoholic poisoning, these same changes have been observed. Riley[4] says: "The opinion of all investigators is unanimous that alcohol causes a breaking down and dissolution of the chromophilic bodies. The larger the quantity of alcohol taken, and the more severe the poisoning, the greater are the changes found in the nerve cell. If the poisoning is continued for any length of time, as it is in cases of chronic alcoholism, then the more solid structure of the cell breaks down under its influence, and in some instances the cell is entirely destroyed and disappears."

The limitations of this occasion forbid us pursuing a study of the action of alcohol on the nervous system further, though it would be exceedingly interesting to trace the chemical changes that take place between the alcohol and the nerve protoplasm and show how the latter is forced to give up its oxygen to supply the demand which the lungs cannot furnish; also to trace the effects of alcohol upon the dendritic processes of the neuron and see the relation between the retraction or drawing up of these processes under the influence of alcohol and the inco-ordination of movements and speech so commonly seen in one even slightly intoxicated. One of the latest theories explaining inco-ordination from any cause is, as you probably know, that the dendirtic processes whose function it is to transmit nervous impulses from cell to cell, and centre to centre, are retracted so that the connection is broken and harmonious action thereby interrupted. This may explain why the intoxicated man does not observe the unequalities of the pavement nor is conscious of the fact that his vacuous gibberish is not the height of wisdom.

Neither can we consider the effects of alcohol on muscle and brain work or glandular activity, but must hurry to a conclusion..

VI. RESUME.

Our studies have shown that alco-

1. Oppenheim, loc. cit., page 114.
2. Riley, loc. cit., page 435.
3. Riley, loc. cit , page 432.
1. loc. cit.

hol resembles food in only one particular, in that it is oxydized, when taken in moderate quantities only, in the body.

Alcohol can hardly make good its claims as a food because of its chemical composition, since Atfield[1] says: "Alcohol is a body analogous in constitution to hydrate of potassium," and it would require a considerable stretch of the imagination to call hydrate of potassium a food.

Food nourishes the body, alcohol can at best be nothing more than a "whip," as Carpenter calls it. Food warms the body, alcohol radiates more heat than it generates. Alcohol increases nitrogenous metabolism, while food conserves the proteids. Food replaces tissue waste and adds to tissue growth, alcohol does neither. Food builds up, alcohol tears down. Food is nature's means to sustain life, alcohol is a protoplasm poison and destroys life. Food makes a normal man, alcohol makes him abnormal. Food does not produce degenerative changes, disease and death, alcohol does all, and more.

Can a substance be both food and poison?

1. Atfield's Chemistry, page 424.

The Stomach Tube.

Crenshaw recommends the freezing of the extremity of the stomach tube to cause temporary anesthesia in its introduction, and thus avoid nausea, gagging, etc. Freezing of the extremity of the tube has proven more satisfactory than any other methods in his experience.

Lachrymal Stenosis in Infants and Its Treatment.*

By Dunbar Roy, A. B., M. D., Atlanta.—Clinical Professor of Eye, Ear, Nose and Throat Diseases in the Atlanta College of Physicians and Surgeons; Fellow of the American Laryngological, Rhinological and Octological Society; Associate Member of the American Ophthalmological Society, etc.

If one will examine the various text-books on opthalmology, he will be unable to find any reference to the subject of the treatment of lachrymal stenosis in infants. The conclusion therefore derived is, that such a condition in infants is treated in the same manner as in adults. This I consider erroneous teaching. Very grave injury would frequently be done to the lachrymal passages of these tender little individuals if the same ruthless probing and cutting were done as is frequently the case among adults. During the last four years of my practice I have had six cases of lachrymal stenosis in infants, all of which recovered perfectly without instrumental interference, and one case presented some such striking features, whether as a coincident or as a casual relationship I do not know, that I shall take the liberty of referring to it more in detail. In speaking of lachrymal stenosis in infants we must naturally do so in a very indefinite manner, not knowing whether the stenosis is in the pucta lachrymalia, the canaliculi, lachrymal sac or in the duct proper. This could only be determined by delicate probing or post-mortem demonstrations, both of which methods being often impracticable. When we speak of lachrymal stenosis in infants we naturally mean such cases as present

*Read before the A. M. Association at its 52d annual meeting.

the usual accompanying symptoms of excess of tears in the conjunctical sac or even flowing out upon the cheek, some excorations of the lower lid and some slight catarrhal condition of the palpebralic conjunctive. There need not have been previously a dachryocystitis either acute or chronic.

The well-known fact that the mucous membrane in infants is so susceptable to swellings and oedematous conditions, will in a great measure account for the stenosis occurring in individuals of this age. Yet such pathologic conditions do not constitute the whole etiologic factor.

For convenience, in these cases, I have made the following groupings of lachrymal stenosis occurring in infants:

1. *Stenosis due to congenital malformations and non-development in some portion of the lachrymal passages.*

Cases of congenital malformation in some portion of the lachrymal passages have been reported by several observers, and the presence of such must not be ignored when cases of epiphora in infants are brought to us for treatment. Congenital absence of one or more puncta lachrymalia have been noted by various writers.

Benjamin Travers (1), as early as 1824. says in his book on Diseases of the Eye, that he had seen a congenital deficiency of the puncta, but the case was very rare, obliteration being much less so.

Schon (2), in 1828, noted the fact that puncta had been observed closed entirely in new born infants, and cites two or three authors who mention the condition or had seen cases.

V. Walter (3) states that congenital atresia of the puncta does not occur except in connection with monopsia, and Desmarres (4) states that Seiler, Schoen, Carron and others have noted congenital atresia of the puncta mostly in connection with concomitant absence of the eye. The congenital absence, however, of these puncta have been observed by others who make no mention of any other congenital defect.

Mooren (5), in a statistics of 108,-416 patients, gives only one instance of "defectus punctorum lachrymalium."

In our own country a case has been reported by Burnett (6) where there was congenital absence of both puncta lachrymalia of the left eye and of the lower punctum of the right eye. The case terminated successfully under operation.

Theobald (7) has also reported a case of congenital atresia of one lower punctum.

Besides these, cases of congenital atresia or absence of puncta have also been reported by Zehender (8), Vossius (9), Fieuzal (10), Emmert (11), Blanchet (13).

Cases have been reported where the puncta were not absent but only closed by a membrane. Le Henoff (14) calls attention to this condition, claiming that it is not rare in infants to find a small pellicle covering the opening of the puncta.

A. Rochon-Davignaud (15), in a very exhaustive article, gives the results of his researches on the anatomy and pathology of the lachrymal passages in the adult and the newborn. According to this observer, in the fetus the nasal duct, up to a certain period, is separated from the

nasal fossa by a membrane. The duct also exhibits annular diaphragms or valves at various points along its course; these diaphragms were found by the author in the newborn in more than half the cases. Persistance of a nearly imperforate membrane closing the lower end of the nasal duct, or the presence of diaphragms with only a minute passage through them, is a cause of stenosis in infants, especially when from the stagnation and accumulation of the secretions, infection, inflammation and swelling of the mucosa result.

Bochdalek (16), as early as 1866, in a contribution to the anatomy of the lachrymal organs, calls attention to the fact that in extremely rare cases the inferior valvule of the lachrymal sac develops so as to form a nearly imperforate thin membrane, closing the canal. He mentions two cases where this condition existed.

The presence of these valves, especially at the junction of the sac with the lachrymal canal, and the junction of this latter with the nasal fossae, are considered by many to play the most important role in the stenosis found in infants.

For instance, Beraud (17), in his researches, states that a valve at the junction of the nasal duct and nasal fossa, is missing only in 3 or 4 per cent. of cases, and he found complete obliteration of this orifice in 15 per cent. of the cases of lachrymal stenosis. He also states that the so-called valvule of Taillefer, situated about the middle of the nasal canal, is present in about 6 per cent. of cases and may be so developed as to close the canal.

2. *Lachrymal stenosis occurring as the result of spasmodic contraction in some portion of the passages.*

Allow me briefly to relate a case which occurred in my practice more than a year ago.

Master B., age 2 months, was brought to my office for consultation on account of an epiphora of both eyes. On examination, I found a slight catarrhal conjunctivitis while the puncta was freely open. The condition had been noticeable for three weeks past. No discharge could be pressed from the lachrymal sac. A wash was given for the eye, consisting of sulphate of zinc, boric acid and water, to be used three times daily and to be accompanied with pressure over the lachrymal sac. This was continued for three weeks with no very decided improvement in the condition. About this time the father noticed that the infant seemed very fretful, and on consulting his family physician, it was decided to have the infant circumcised. This was accordingly done and an immediate cessation of the epiphora was noticed, which has continued constantly ever since. I then began to look up the literature to see if I could find a similar case. This I have been unable to do. The relationship between the circumcision and the cessation of the lachrymal symptoms was so close that I cannot but consider it in the light of cause and effect.

In looking up the literature of the subject, I find that there is some reference to spasmodic constriction of the lachrymal passages as a cause of stenosis.

In the transactions of the French Opthalmological Society, 1891, (18), Galezwoski states that epiphora often occurs from spasmodic or irritative

muscular contractions of the lachrymal passages without any organic changes being present.

Wicherkiewiz at the same meeting corroborated Galezwoski's observation as to the occurrence of spasmodic strictures.

Seggel (19), in quite an elaborate article, calls attention to the presence of muscular tissue around the canaliculi and puncta, and reports a case of stenosis which he said was due to contraction of the shincter of the punctum. It is the atrophic condition of the shincter in my judgment which is the frequent cause of "watery eyes" seen in the very aged.

R. Schirmer (20), in Saemisch Handbuch, says that spastic contrictions of the canaliculi may occur (as shown by McNamera and Galezwoski) in nervous and anemic persons and in this way produce the same disturbances as other obstructions.

McNamara (21) in his work upon the eye, mentions briefly spasmodic stricture of the canaliculus, which occurs either at the inner or outer opening of the canal. The accompanying watery eye, if long continued, will be of intermittent character.

Fano (22) calls attention to the existance of spasmodic epiphora due to spasmodic contriction of the lachrymal puncta and canaliculi by spasm of the muscles of Homer. The condition occurs only in women of nervous temperment, often in association with neuralgias.

Since the occurrence of this case in my own practice, I am firmly convinced that we should look more carefully into the conditions which might act as a reflex cause in producing this spasmodic constriction in the lachrymal passages. Observation teaches us that epiphora in infants sometimes disappears in a night, and in such cases may we not attribute this result to a relaxation of a spasmodic contriction?

3. *Stenosis, the result of a catarrhal thickening of the mucous membrane at some point in the lachrymal passages.*

This third and last consideration of stenosis I would place as the most frequent cause of epiphora in infants.

In the cases which I have seen there was a slight catarrhal conjunctivitis which was either primary or secondary to a similar condition in the lachrymal passages. In only one instance could secretion be expressed from the lachrymal sac. In two instances there was a marked catarrhal condition of the nasal cavities. This latter organ should always be closely examined in such cases.

A. Peters (23), of Bonn, has reported seven cases of lachrymal stenosis in infants due to a catarrhal condition of the mucosa of the lachrymal sac. He believes that blenorrhoea of the lachrymal sac in newborn infants is caused by the persistence of the fetal membrane closing the lower end of the nasal duct. Fluid accumulates in the sac, the product of a cellular disintegration and secretion from the mucosa of the sac, rather than derived as an inflammatory exudate from catarrh of the mucous membrane. The condition is one of atresia and retention and not catarrhal inflammation.

He recommends simple treatment —expression of the contents of the sac by digital pressure and repeated irrigation of the eye without the use of the knife or probe. He quotes Vossius and certain French authori-

ties in favor of gentle treatment. He strongly urges this palliative treatment in preference to any instrumental applications.

In support of Peters' theory, Lange (24) reports a case of blenorrhea of the lachrymal sac in a child five days old. Pressure upon sac was followed by a discharge of laudable pus from the nasal cavity of the same side, but none came from the lachrymal canals. All symptoms of lachrymal obstruction disappeared in a few days.

Heddaeus (25) confirms the observations of Peters, but differs from him in thinking that the mechanical expression of the contents of the sac is unnecessary.

Konigshofer (26) in discussing the epiphora in children says that dachryocystitis or dachryostasis neonatorum, according to his observation, is mostly a temporary blocking of the passages by mucous or a persistence of a thin epithelial closure of the nasal end of the duct. All cases observed by him were cured by industrious expression of the lachrymal sac, a passage of the sound being necessary in only one case.

Landolt (27), in treating of obstructions in the lachrymal passages of new-born, has this to say in regard to the treatment: According to his observations it is never necessary to slit the puncta. He dilates the punctum with a conical sound and injects either a bichloride solution 1-5,000 or a 4 per cent. solution of borac acid into the sac with an Anel's syringe.

Before writing this article and after consulting the various works on ophthalmology to see what the outhors had to say in regard to epiphora in infants, I addressed letters to twelve ophthalmologists and asked them to answer the following questions:

1. Have you ever seen any case of stenosis of the lachrymal passages in infants which you thought was due to spasmodic contraction, the result of a reflex irritation?

2. What treatment do you use for lachrymal stenosis in infants?

To these letters I received seven replies, as follows:

Dr. H. Knapp: 1. No. 2. I leave the lachrymal trouble alone as it commonly rectifies itself by the development of the nose.

Dr. E. Gruening: 1. I cannot recall a case of stenosis of the lachrymal passages either in infants or adults due to spasmodic contraction. 2. In cases of lachrymal stenosis in children I probe under ether, using Theobald's probes.

Dr. Wm. Cheatham: 1. No. 2. I have seen as many, I think, as five cases of stenosis of the lachrymal duct in infants, all relieved by from one to three probings with Bowman's No. 1, without excision of the punctum.

Dr. Swan Burnett: 1. I have never seen a case of stenosis of the lachrymal passages in infants which I thought was due to spasmodic contraction. 2. The few cases of dachryocystitis in infants that I have seen I have treated in the usual way by opening the canals. I don't remember that I ever saw a case of stenosis not due to inflammation.

Dr. Adolph Alt: 1. I do not remember having ever seen a stenosis of the lachrymal passages in infants which I thought was due to reflex contraction. 2. The cases of stoppage in infants, if not due to an infection of the mucous membrane of the drainage apparatus, I have always referred to an epithelial adhesion and

this usually gave way to one or two probings.

Dr. Geo. de Schweinitz: I have never seen a case of stenosis of the lachrymal passage in an infant which I thought was due to a spasmodic contraction, the result of reflex irritation. 2. The treatment I use for lachrymal stenosis in infants depends entirely upon the etiology. Many of the cases get well without any treatment except irrigation of the conjunctival sac and nares—they get well simply because in the development of the nose a pre-existing contraction of the passage disappears. Others, evidently dependent upon a nasal catarrh in the broadest acceptance of the term, get well by nasal treatment. A few with a good deal of purulent secretion are associated with stricture and seem to me to demand the same treatment that a similar condition in adults requires. I very rarely, however, and I have seen a good many cases, have found it necessary to divide the canaliculous and pass probes.

Dr. Samuel Theobald: 1. No. 2. I have met with a good many cases of blenorrhoea of the lachrymal sac in infants accompanied with epiphora. In most of these cases there was not an actual stricture of the duct (such as we meet with usually in adults), and they have gotten well without operative interference. My favorite remedy is a collyrium of hydrarg. bichloride 1-24 gr., sodium chloride 3 grs. to ounce of water. This to be dropped into the inner corner of the eye three times daily, each application to be preceded by an attempt to empty the lachrymal sac by pressure with the finger tip. Occasionally it happens that no benefit results from this treatment. Then, after it has been thoroughly tested for some weeks, I resort to operation, slitting the canaliculus and probing the duct. In all my cases a cure was established by the use of an astringent wash to conjunctiva in conjunction with massage over the lachrymal sac. In no instance was a probe used. I can imagine some cases where it is necessary to dilate the canaliculi with a probe but never a case where it is necessary to slit the canaliculi and pass probes into the nasal duct. Palliative measures, such as the use of astringent washes accompanied by massage over the lachrymal sac, will accomplish the necessary result in all but exceptional cases, even if the treatment has to be continued for several weeks. I believe that the canaliculus should never be slit and thus destroy forever the contractile effect of the sphincter around the puncta. At the same time it is necessary to see that there is no blocking of the nasal passages which inspissated mucous. Cleansing of the nasal passages should be as routine as the cleansing of the eye. I am firmly convinced that many cases of epiphora in infants will be relieved if more judicious attention is given to the nasal cavities.

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A Personal Experience With Anti-Diphtheritic Serum.

BY M. R. BRASWELL, M. D., Rocky Mount, N. C

My son, six years old, awoke on the morning of November 30, 1901, with a croupy cough and a temperature of 103 degrees F. His pulse was quick, the skin dry, the tongue slightly coated, and the pharynx moderately congested. I administered a cathartic dose of calomel and gave, every three hours, aconite and liquor ammonii acetatis, alternated with quinine and salol in the usual doses. The fever continued for three days, ranging from 103 to 101 degrees F., when I noticed on the tonsils a few spots of pearly white membrane, and on the soft palate a bluish-gray deposit. At this point, the temperature having declined to 101 degrees, the fever mixture, quinine and salol, were discontinued and the tincture ferric chloride was prescribed, to be given every three hours. Sprays of hydrogen dioxide and germicidal gargles were resorted to, and the throat was swabbed with Loeffler's solution. There had been no croupy cough since November 30, although the other symptoms continued, unchanged, with a gradual extension of the exudate until, on December 8th, the whole of the pharynx and tonsils was coated over with a tough and closely-adherent membrane. A muffled, croupy cough now appeared with aphonia and difficulty of respiration and the severity of these increased daily. There was notable general depression, with cold sweats and coldness of the extremities; gradually the pulse-rate became more rapid, the dyspnœa more pronounced, and the countenance assumed an expression

of great suffering and anxiety. The face and lips grew livid and swollen, and each paroxysm of croupy cough was followed by an outbreak of profuse perspiration. The treatment now consisted of the constant vaporizing of carbolic acid, turpentine and eucalyptus, which was interrupted only for the sublimation of calomel or the slacking of lime under a croup tent. The use of tincture of ferric chloride, every two hours, was continued; whiskey was employed as a stimulant and the local treatment was not interrupted.

Upon the 12th of December, when there appeared to be no hope of relief from the treatment, a report was received from the North Carolina Biological Department, showing that the Klebs-Loeffler bacilli were present in the exudate. I thereupon prevailed upon the very competent physicians who were treating the case for me, to use the antidiphtheritic serum of Parke, Davis & Co., which they consented to do. Procuring a new antitoxin syringe and a supply of serum, the instrument and the skin below the scapula were sterilized and 2,000 units of "XX" antidiphtheritic serum was injected. At the time when the serum was injected, the breathing was very difficult and the poor little fellow appeared to be almost in a moribund condition with that most dreaded affliction of childhood steadily tightening its relentless grip on his defenceless throat. The treatment by vaporization and sublimation was discontinued, although the iron and whiskey with the local use of hydrogen dioxide and application of Loeffler's solution were continued.

When twelve hours had elapsed my little boy presented an entirely different appearance from the horrible picture so familiar to all who have seen a case of laryngeal diphtheria. He now was enjoying a quiet and restful sleep, although some difficulty in breathing was manifest and there was some stridulous respiration and an occasional paroxysm of croupy coughing, which was, however, much modified in severity. At this point we gave a second dose of 2,000 units of the "XX" antidiphtheritic serum, which resulted in so much improvement ten hours later that we were encouraged to give still another dose of the same amount. Twelve hours afterwards the last dose of 1,500 units was given chiefly to make sure that a sufficient quantity of Serum had been introduced into the body of the little patient to overcome the toxemia.

The evidence of the presence of diphtheritic membrane had disappeared, the breathing became free and natural, although phonation was imperfect. Since the very beginning of the antitoxin treatment, the boy coughed up and expelled large quantities of dark gray material, many particles of which were streaked with blood. By the end of the third day after the serum treatment was begun, the pharynx was entirely clear of all deposit. The local treatment, which consisted of the astringent gargles and mild aseptic sprays, was continued along with the internal use of the iron. I had another bacteriologic examination made upon the 21st of December with a negative result.

From this time on the patent enjoyed a most favorable convalescence. He did not have a single untoward result following the injection of 7,500 units of antidiphthe-

ritic serum. This case is remarkable chiefly because it shows the prompt relief to be obtained even from the late use of serum. I have no doubt that the patient would have been relieved and the poison neutraliezd within forty-eight hours of the serum had been administered early in the course of the disease; and not only that, but less serum would have been required to accomplish the cure, and the extension of the membrane from the pharynx to the larynx might have been prevented, thus sparing the child much physical suffering and his family the greatest of distress.

The delay in using antidiphtheritic serum in this case was due to the inexperience of my able medical friends in its use; they had never seen it employed, and consented only after every other means of treatment had been tried in vain. It is useless to say that these gentlemen are now most enthusiastic converts to the serum treatment of diphtheria and attest its harmlessness when procured fresh and from a reliable source, and administered under strictly aseptic conditions.

I have been actuated in giving this brief account of my own domestic experience with antidiphtheritic serum, solely by a profound sense of gratitude. I realize that it relieved my child from agonizing suffering and stayed the hand of death, to our indescribable joy, when there was no other hope. I believe that any child in reasonably fair condition can be successfully relieved and cured by the prompt administration of antidiphtheritic serum if given early and in sufficiently large doses. I therefore beg of medical men to use it in every case of diphtehria or membranous croup, assuring them that the relief which they will be able to afford their little suffering patients and the prompt cure of the disease will be their greatest source of satisfaction.

Communication.

Mr. Editor:

I drop you this to say that I saw in your journal a long paper by Dr. Julian Carroll, before the Dorchester Medical Association, about summer diarrhoea in children, cholera infantum, so-called, and while the paper is an admirable, almost classical one, he fails to mention a remedy or line of treatment which I have scarcely ever found in 50 years, to fail, to stop the "grassy mound" business. I allude to the use of arsenite of copper. How it acts or why it should kill out the *bugs,* I don't know. Maybe the two metals set up a current of electricity that railroads them out of the babies. Anyway, the result is the same, the baby gets well, which is the main issue.

My method of using it is as follows: I take one tablet of arsenite of copper and dissolve it in one-half pint of *boiled* water, cooled. If there is much thirst I give one teaspoonful every 10 or 15 minutes until some impression is made on the evacuations and the fever and thirst is moderated, then less often. p. r. n.

Diet of course must be regulated.

Homeopathy, I hear some one say. I am no Hahnemanite, but have learned some valuable facts from our "Simelea Similibus" brethren and from Mr. Ringar.

I am speaking of so-called cholera infantum. Dr. Carroll writes of summer diarrhoea. Maybe they are different diseases, but anyway, the treatment outlined above, if institut-

ed in time, hardly ever fails. Occasionally minute doses of calomel are indicated, but not often, and the whole array of peptins, astringents, opiates, bismuth, "et it genus omne" may be safely relegated to the rear.

You don't want long articles, nor can I write them, but I happen to know about this treatment and it may help some young brother.

The indicated dose is for a two-months old baby; for older ones, larger doses, of course.

Cholera infantum will have lost its terrors when our brethren have learned that arsenite of copper is as nearly a specific for this trouble as medicine can be for any disease.

Try it and report.

J. F. Baggot, M. D.

Bamberg, S. C., Jan. 5, 1902.

The Treatment of Children.

Packard makes a number of points in regard to the difference in the medical treatment of children and adults. In the first place children cannot give their subjective symptoms. We have to depend more on our own examination and we must not forget that the child is not a man cut down. Much may be learned by close observation of attitude, the character of the cry and respiration, the facies, and examination of the fontanelle as a routine matter. He points out some ways in which he thinks we are misled in estimating the frequency of certain diseases in children, for example, typhoid, where the typhoid tongue as seen in the adult is not ordinarily met with. We must also avoid falling into error in examining the chest of children, as the position of the apex beat is quite different, being higher and the second sound in the pulmonary area is louder and more clearly defined than in older persons. He also found a curious square area of dullness at the extreme left chest, posteriorly closely resembling what has been described by Ewart as a sign of precardinal effusion. He thinks the left lobe of the liver may possibly be responsible for it. The physical signs are often quite different in children and adults; thus the cracked-pot sound can be readily developed on percussion over the healthy lung in an infant. Croupous pneumonia is another disease in which there is a great difference between children and adults and he thinks we see much more frequently silent pneumonia and noisy pleurisies. The examination of the abdomen even offers more peculiarities than the chest. The normally large liver is one point he refers to. As regards the nervous system he refers to three points, the absence of Kernig's sign, which seems to have no significance, the slight value of Babanski reflex and the ease in which lumbar puncture can be performed. The question of prognosis is a matter of importance. Children recover rapidly; they also die suddenly. The toxin elimination may be presumed to occur with greater facility than in the adult, and the heart has greater reserve force and reparative power than has the heart of older persons. He speaks next of the necessity of individualism in milk modification for infant food, the dangers of the routine treatment of digestive troubles, the too frequent diagnosis of intestinal parasitism, the impropriety of slitting the frenum of the tongue and the indiscriminate use of braces in rickety children, also the importance of retropharyngeal abscess, the relative easy vulnerability of the endocardium in the child, the variability of symptoms of malarial infection, etc.

Review of Medical and Surgical Progress.

How Cornaro Added Fifty Years to His Life.

Dr. Felix L. Oswald, in *What to Eat*, describes the experiment of the Venetian nobleman, Cornaro, "who added some fifty years to his chances of survival by reducing his rations to one-fifth of their former averages."

"The merit of the experiment," says Dr. Oswald, "is enhanced by the circumstance that he descended from a family of gormands. His father three of his uncles and all his elder brothers had gluttonized themselves to death before their fiftieth year. Luigi (Louis), the third of four prodigal sons, had not yet celebrated his fortieth birthday, when the doctors informed him that his digestive troubles had become serious enough to justify an interview with a notary public. In other words, they advised him to make his will, and seem, indeed, to have given him up for lost, when the death of his younger brother suddenly sobered him. He left Venice, and fitted up a room in the turret of a solitary country mansion, where he pondered the problem of salvation from the fate that threateded to extinguish his family.

"There was no doubt that his relatives had perished of overeating, and Louis Cornaro resolved to cure the complaint by the removal of the cause. Week after week he curtailed his rations, weighing every morsal of food with the exactitude of a druggist compounding a critical prescription, till he had reduced his daily stint to an average of fourteen ounces of solid comestibles and half a pint of light wine—water alone at discretion.

"His friends predicted his death by starvation, but Cornaro stuck to his plan, and in less than a year contrived to get rid of all of his ailments. He could digest almost anything, was able to walk twenty miles without fatigue, and often felt as light and happy as a disembodied soul. His very eyesight improved, and he began to feel young again, so much so, indeed, that he ridiculed the idea of preparing for the perils of the year, which none of his kinsmen had been able to pass.

" 'A man ought to be in his prime at fifty,' said he in a letter to a Salerno physician. 'I feel fully able to continue my earthly pilgrimage for another quarter of a century.'

"Time more than fulfilled that prediction, for Cornaro enjoyed bodily and mental health to the end of his *ninety-eighth* year; but it is true that he gradually became extremely circumspect in the choice of his diet. . .

"In the course of a week the aggregate of his food never exceeded the sum of seven times fourteen ounces, and as he gradually became a object of international curiosity and (being withal, a man of wealth), entertained countless visitors, it appears wholly certain that for the last fifty-seven years of his life he was never sick for one day."

Hypnotism Extraordinary.

The Italians appear to be peculiarly susceptable to hypnotic suggestion under slight provocation, and failing any external influence they are prone to a kind of auto-hypnotism, which spreads until it assumes an epidemic form. We can recall an instance in which a whole village, or at any rate, the feminine inhabitants thereof, became the subjects of maniacal excitement, which was appeased only by the dispatch of a regiment of dragoons, whose presence had the desired effect of restoring peace to their troubled souls. Quite recently, a similar outbreak took place at a small village near Udine, where some twenty persons of both sexes and of all ages became hypnotized, after watching the contortions of a professional exorcist and gave themselves up to more or less violent antics. Although these manifestations are seen to the best advantages among the impressionable population of Southern Italy, it must not be forgotten that in a modified form they characterize crowds in all parts of the world. The influence of a crowd collectively on the individuals of which it is composed is a factor with which the authorities have to reckon, and history shows that such a crowd will do things and commit deeds at which its units individually would be ashamed and even terrified. All commanding personages exert a similar influence over those who come within their sphere. Great preachers, and even mere demagogues, possess the power of galvanizing their audiences and subordinating their reasoning powers for the time being. There is no strict line of demarkation between this influence and that to which at a more advanced stage we apply the term hypnotism.—*Medical Press.*

Removal of Foreign Bodies From the Air Passages.

In the removal of foreign bodies from the air passages, De Forest Willard (*Journal of the American Medical Association,* Oct. 26, 1901,) says that coughing should be encouraged and forcible inspiration restrained. Inversion in the prone condition as a domestic practice is advisable. Laryngoscopy is helpful if the body is lodged at the vocal cords. It may be extracted by forceps or by laryngotomy. If time permits, the X-ray may be brought into serviceable use for diagnosis. Careful diagnostic investigation is important to determine the actual presence of an impacted body, and its location.

Tracheotomy under local anesthesia should be the rule if the object is lodged at the bifurcation or in the bronchi. Tracheoscopy, suction, and forceps manipulation must be cautiously employed. Prolonged instrumentation adds greatly to the danger of pneumonia. If extraction is not secured through the tracheotomy wound, the chest wall should not be invaded unless an artificial respiratory apparatus like the Fell-O'Dwyer is at hand, and oxygen available. With the assistance of these appliances, however, the bronchus may be reached, anteriorly or posteriorly, since by their use rhythmical movements can be maintained. Resultant abscess of the lung should be treated by incision and drainage.—*Med. Age.*

Sciatica.

I suffered from sciatica and rheumatism the torments of hell for six weeks; cured in less than three minutes by rubbing from hip to heel an ounce of carbon bisulphide. Give it to suffering humanity.

A gentleman from Canada called

that is more dangerous, more vicious, and more criminal than that referred to see me—saw my intense suffering—and told me that a wealthy man spent a large fortune in trying to get cured of rheumatism, and ten cents worth of the above cured him. Like a drowning man grasping at a straw, I tried it, and was well before I got dressed.—*Dr. W. S. Clive, in Alkaloidal Clinic.*

The above reminds the writer of a happening when a young practitioner a good many years ago. He had a most obstinate case of sciatica under his care, and for a long time had tried numerous remedies. Finally his patient was one day visited by an old friend from a distant town, who stated that after many courses of treatment he had himself been cured by a simple remedy, which he suggested in the instanc at hand. It was the application over the painful region of a poultice made of the seed potatoes growing on the ordinary Irish potato *vine.* Disheartened by many failures, the writer consented to its use, and was much surprised to find it immediately effective. He subsequently used it in a number of cases, not always with the result of absolute cure, but invariably with a relief obtainable in no other way.—*Editor Peoria Medical Journal.*

Malaria Infection and Its Prevention.

WALTER SHROPSHIRE, in Virginia Medical Semi-Monthly.

The treatment suggested by the author is, first, to stop every case of malaria at once by adequate doses of quinine, for the longer it runs the greater the number of gametocytes formed in the blood, and the greater danger is the patient as an infector. By adequate doses is meant not less than two grams of quinine, and that in an acid medium, or followed by an acid that will render the medium acid after it is taken, for quinine will not absorb in an alkaline medium. When the paroxysms are broken the patient should be required to take one gram at bed time and one-half gram the next morning on every sixth day for two months or more, and to sleep under mosquito netting or in well screened houses the remainder of the warm season.

Urge the drainage of all places calculated to afford larval development of the mosquito, and if drainage is impractical, treat them once a week with petroleum.

Substitution Extraordinary,

Substitution as generally understood is one of the abominable evils against which physicians have to be on their guard. The only way to get rid of this evil is for a physician to insist on having his prescriptions filled by a reliable druggist, and then watch this druggist occasionally to see that he does not fall from grace. The reputation of the physician, the health, and sometimes life, of the patient depends on the correct filling of prescriptions. While we believe that very few druggists are guilty of substitution, some of them are. We refer now to the substitution of "something just as good" for a similar preparation and which the druggist may believe will answer the purpose, especially if it is cheaper. But the druggist who places his "belief" above the written instructions of the physician, will be dishonest in other ways and should be treated accordingly. Our attention, however, has been called to another form of substitution

to above, and one that is more difficult to guard against. We have received a circular letter from the Farbenfarbriken of Elberfeld Company, in which they record their experience in ferreting out a despicable adulteration of their products. The facts in the case were brought out in a law suit and revealed that certain men were actively engaged in counterfeiting labels and boxes and filling them with all sorts of material utterly unlike the genuine and then selling them to druggists as the real article. While we believe that this form of adulteration is unique to this particular instance, it is well that we recognize the possibility of such an occurrence in the future. It is further quite probable that this form of fraud would be worked only on unscrupulous druggists who desire to buy the cheapest without regard to quality.—Editorial—*Journal of the American Medical Association*, January 4, 1902.

Sanmetto in Irritable Bladder.

Dr. Richard Eiche, of Cleveland, O., writing, says: "It is doubtless of great value to the medical profession that we have a remedy at our command like Sanmetto. I have used this remedy with much success in irritation and inflammation of the neck of bladder, in prostatitis, in nervousness arising from irritation of neck of uterus, ovaries and testes, in incontinence of urine and in old cases of gonorrhea and gleet. This remedy also powerfully influences the reproductive apparatus. It is not here my intention to waste space in pathological discussions, but will say that Sanmetto is a weapon in the hands of the physician, and a backbone to the worn and old of both sexes."

"THE MELANCHOLY DAYS."

"The melancholy days have come," (says Bryant,
But he lived in Connecticut,) "the saddest
Of the year;" but just where the sad comes in
I am, just now, not able to perceive;—
Can't see it.
With its balmy air and zephyr breezes,—
("Wailing winds and naked trees" nothing,)

The sense of hush,—the gorgeous trees-es—
The purple mist that dims the distance—
October is just splendid!
Why, it's harvest time! See the pumpkins!
And the peas-es! and the pinders! and perhaps—
Potatoes (or po-turnips,) how they tumble into market!
And the farmer? Is he happy! Rather!
Where's the melancholy?

Purple are the grapes-es now, and juicy
Are the apples. Nuts are brown. In the forest
Sings the mocker, (thinks it's spring;)
Red the roses in the garden; and subscriptions
Are just *pouring* in;—where's the sad?

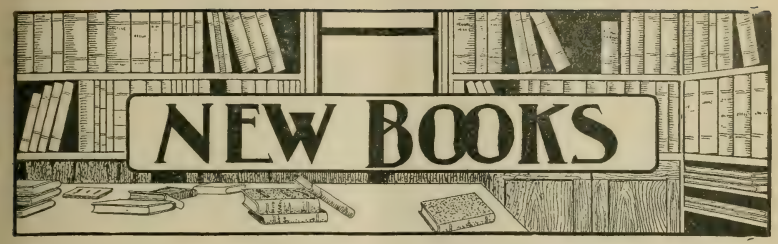
See yon ripples on the water! (Imagine the water;)
Why's its solemn stillness thusly broken?
I guess a big old trout has taken
In a fly; I'll take *him* in!
(Look! beauty, ain't he?)

And now the doctor hies him outward,
Now's the time
He's got to rustle; (not to see a patient
But to get his money;) and with Christian charity
Forthwith *he* remembers the poor——
Editor; (please remit doctor!)

Heaped in the hollow of his desk the doctor's bills are laid,
He'll rustle 'mongst his patrons till the last darn one is paid.
The farmer and his men are flush, and in their eyes he sees—
Speculation? No! but *cash*—to pay—in lieu of—*peas!*†
Oh, where's the melancholy?

[† For fear that this beautiful point may not be clearly seen by the city physician, it is necessary to explain that too often the poor tired country doctor has to take his pay "in kind"—in "chips and whetstones"—farm products, or anything he can get. One rustling doctor—a friend of ours—wrote us that he "collected on account" (in one day) a parrot, two canary birds, four bushels of black-eye peas, and a calf worth four dollars! Lucky doctor;—"and," he added, "the farmer 'throwed in' a cat!" Fact!]

Lifted from *The Texas Medical Journal*, (*Red Back.*)



A Text-Book of Diseases of Women.—By Charles B. Penrose, M. D., Ph. D., formerly Professor of Gynecology in the University of Pennsylvania. Fourth edition, revised. Octavo volume of 539 pages, handsomely illustrated. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, $3.75 net.

A careful review of the revised edition of Dr. Penrose's Text-Book of Diseases of Women convinces the writer that it is certainly one of the most excellent works of its kind on the market. Primarily intended for the student, it abundantly serves the purposes of the general practitioner, and its author being a man of erudation and extensive experience, makes it profitable reading for the specialist as well. The text covers pretty nearly the whole subject of gynecology, and sets forth the author's ideas in such a clear and convincing manner as to be readily understood and leave no doubts in the mind of the reader as to what is the real truth concerning each point at issue.

Reading the book with a critical eye, the writer finds very little to criticise. A few matters will, however be noticed.

On page 208 the author very properly calls attention to the danger of perforating the uterus by the curette. He says: "If perforation, should happen the uterus should be carefully washed out with the bichloride solution," etc.

Against this practice the writer would respectfully enter a protest. Washing out the uterus with anything after a perforation has occurred is a very questionable procedure, because of the danger of forcing septic matter into the abdominal cavity, and when an irritating agent like bichloride is used, irrigation is doubly dangerous. The writer has seen the irrigation solution escape through the fallopian tubes into the abdomen; how much easier would it be for it to escape through a perforation. It is quite certain that this accident would never happen in the hands of Dr. Penrose, but it is hardly the right advice to give his students.

Dr. Penrose's description of operations is superb, and his choice of operations shows discriminating judgment, but in discussing removal of the uterus he fails to mention *bisection of the uterus* as practiced by Kelly, MacDonald and others, which method is applicable in difficult inflammatory and fibroid cases.

The book is singularly free from surplus words, and it is rather surprising to see more than two pages

devoted to a condemnation of an obsolete procedure—the tail knot and link-ligation, which if mentioned at all, might have been dismissed in two lines.

But these minor faults should not detract from the value of what is perhaps the most popular and up-to-date text-book of gynecology extant. So popular is it with both student and practitioner that regularly each year a new edition is called for.

The new edition has been carefully revised, much new matter has been added, and a number of new original illustrations have been introduced. In its revised form this volume continues to be an admirable exposition of the present status of gynecologic practice in this country.

J. W. L.

PHYSICIAN'S POCKET ACCOUNT BOOK. By J. J. Taylor, M. D.

This is an account book of medium size, containing, besides numerous pages for accounts, others for obstetric and vaccination records, etc.

At the front of the book are various valuable suggestions of a business nature which will be gratefully received by many who recognize a physician's business limitations.

P. Blankinston's Son & Co., 1012 Walnut Street, Philadelphia, Pa.: THE PHYSICIAN'S VISITING LIST FOR 1902.—This is a small, convenient and compact book of proper size for the pocket, containing calendar, dose table, table for the calculation of the period of utero-gestation, etc.

As well as pages for the regular visiting list, there are others for addresses of patients, vaccination and obstetric engagements, births, deaths and cash accounts.

In short, the book comprises in a small space all the necessities of a thoroughly good visiting list.

The January SCRIBNER introduces the first of three papers by Frank A. Vanderlip, formerly Assistant Secretary of the Treasury, on "The American Commercial Invasion of Europe," showing how American goods obtained a foothold on the continent.

"The Treaty-Making Powers of the Senate" is explained by Henry Cabot Lodge, Senator from Massachusetts.

Fiction contributes "A Revelation in the Pennyrils," (illustrated in colors) by Evan Macpherson.

"The Harvest," in four chapters by Jesse Lynet Williams, "The Wooden Indian," by Albert Ellsworth Thomas, (illustrated in colors, by Christy.

THE LITERARY DIGEST of January 11th, contains, in part, discussions of the following subjects: Topics of the day: American Feeling Toward Germany, The Kaiser's Call in Caricature, Will a Revolt Follow the Cuban Election, Resentment in the Army over the Censure of General Miles, Syndicates Within Syndicates, Cartoons of the New Year, Last Year's Lynchings, Hangings, Suicides and Murders, Liquor Journals on Sunday Saloons in New York.

Science and Invention: Had All Mankind a Common Origin? Still Discussing Marconi, Effectiveness of Double Sashes, A Study of the Eyes of Animals, False Meteorites, Effects of Music on Horses, Are Colds "Catching"? The Old Oaken Bucket—A Hygienic View.

Medical News and Items.

Small pox has broken out in several counties in North Carolina.

A movement is on foot to segregate Philippine lepers in the island of Bary.

Montreal doctors are making great efforts to establish a sanitarium for tuberculosis patients near their city.

Dr. Kelly has donated $10,000 to Johns Hopkins Hospital to enlarge the gynecological department.

Johns Hopkins Medical School has the largest class of freshmen in its history, 75 having entered this class.

Dr. J. T. Teague, of Roxboro, N. C., will spend several months in Vienna this winter studying the eye and ear.

Doctor, I will sell my eye and nose practice here, which is paying over $500 a month. Business is new, clean, and up-to-date. If you can handle the work and are looking for something in this line, it will pay you to investigate. DR. SEYMOUR, 1013 Texas Ave., Houston, Tex,

To License Osteopaths?—The osteopathists, the *Sun* says, have converted Senator Thomas C. Platt to their side, and the result is that Senator Edgar T. Brackett has a bill providing for the licensing of practitioners of osteopathy in the State of New York after July 1st next. All candidates for a certificate are to pass a regent's examination.

It is reported that the free hospital for consumptives at White Haven, Pa., has had astonishing good results, although the sanitarium itself is said to be a building which would ordinarily be regarded as poorly adapted for that purpose. The principal features of treatment are hygienic out-door life, followed by feeding and a discipline practically military in its strictness.—*Col. Med. Jour.*

One Hundred Thousand Dollars for Postgraduate Hospital.—Dr. D. B. St. John Roosa, president of the Postgraduate Hospital Association, has announced that a man, whose name is withheld, had made a conditional gift of $100,000 to be applied to the liquidation of the hospital's debt. Dr. Roosa said the total debt of the hospital was a little over $400,000. The condition attached to the gift is that the remaining $300,000 is to be raised before the $100,000 becomes available.

Osteopathy in New York.—A bill has been introduced into the New York State Legislature compelling the board of regents to grant a license to practice medicine to any osteopath who passes satisfactorily an examination in all the branches of medicine except materia medica and therapeutics. It is said that during the past year Speaker Nixon

has been treated by one of these persons, and the osteopaths are counting upon his support of their measure. Last year a similar bill failed to pass. —*Medical Record.*

Arrest of an Illegal Practitioner.—A man named Ward, who is said to be a D. D., and therefore entitled to the appellation of doctor, who recently sued a woman in this city for $90 for treating her according to the principles of somatopathy, a system of treatment which he declares himself to be the originator, was arrested last week on a warrant obtained by the counsel for the County Medical Society. Ward was charged with practicing medicine without being legally qualified to. The man waived examination, and was held in $100 bail for trial in Special Sessions—*Medical Record.*

Dr. Sullivan Arrested.—In Forsyth County, N. C., near Germantown, small pox is prevalent, and the health authorities are endeavoring to stamp it out. Dr. Sullivan, an unlicensed physician practicing in that section, with the assurance of the ignorant, told the people the disease was only some kind of an itch and advised them not to be vaccinated, thus inciting the people to resistance of the health officers. A warrant was sworn out against him for practicing without license, and he was arrested and lodged in the pest house of the county, he having been exposed to small pox.

Opposition to Consumptives.—The town of Rockland, in Sullivan county, N. Y., has just adopted an ordinance imposing a fine of fifty dollars on any one who conducts a sanitorium, hotel or other place in which consumptives are received, and imposing the same penalty on any one who receives into his house or harbors any consumptive not an immediate relative of the family or dependent upon the family for support. A consumptive is not allowed even to visit relatives or friends in the town. In Liberty, a similar ordinance was passed a few weeks ago, and an epidemic of phthisiophobia appears to be sweeping through Sullivan county.—*Medical Record.*

The following New Orleans physicians have been selected, says the *Journal of the American Medical Association,* as civilian members of the Yellow Fever Institute, created by act of Congress in March last, and placed in charge of the United States Marine Hospital Service: Drs. Felix Formento, Henry A. Veazie and Lucien F. Salomon, and Professor Beyer of Tulane University. The institute will be divided into four sections, the first of which will concern itself with the history and statistics of the disease, including the relation of the slave trade and modern sanitation. Section B will be occupied with the cause of the disease, while Section C will specially study its transmission by the mosquito. This insect will be studied from all points; its life and habits will be thoroughly investigated, and the question whether its progeny may be conveyed by other than its means worked out. Section D will consider quarantine and treatment. The main lines of study of this section will be whether disinfection of baggage is necessary to prevent the spread of the disease; the treatment of the patient, the immunity of individuals and of races, individual prophylaxis and communal prophylaxis by means of sanitation.—*Med. Age.*

A VALUABLE PILL FOR PHYSICIANS PRESCRIBING

PIL. ANTISEPTIC COMP.--Warner

FORMULA.

Acidium Salicylic.....1 gr.
Sodium Sulphite .....1 gr.
Pepsin Conc't .....1 gr.
Capsicum .....1-10 gr.
Ext. Nuc. Vom. ..... 1-8 gr.

A Scientific combination, assuring absolute therapeutic effects indicated in DYSPEPSIA and INDIGESTION, particularly when attended with acidity of the stomach.

Please Specify "WARNER & CO." and Avoid Substitutes.

Pills sent by mail on receipt of price. 55 cents per bottle 100 Pills.

(FROM VENTRICULUS CALLOSUS GALLINACEUS)

INGLUVIN

SUPERIOR TO PEPSIN OF THE HOG

A POWDER PRESCRIBED IN THE SAME MANNER AND DOSE AS PEPSIN, WITH BETTER RESULTS.

A SPECIFIC FOR VOMITING IN PREGNANCY

WM. R. WARNER & CO.

PHILADELPHIA. NEW YORK. CHICAGO.

THEREAPEUTIC HINTS.

An Inhalation for Mixed Infection in Pulmonary Tuberculosis.

Dr. H. E. Lewis (*Vermont Medical Monthly*, December 25, 1901.) says that in cases of mixed infection with markedly purulent expectoration, for the purpose of allaying laryngeal irritation and cough, the following inhalation has proved most satisfactory:

℞ Compound tincture of iodine 4 drachms;
Tincture of tolu..... ½ an ounce;
Tincture of cinnamon..... 1 drachm;
Carbolic acid..... 1 drachm;
Chloroform..... 1 drachm;
Alcohol, enough to make ... 4 ounces
M.

Use in a bottle with a large cork through which two glass tubes are run. Inhale by drawing through the shorter tube, which must not reach down to the liquid.—*N. Y. Medical Journal.*

Frost Bite.

The following is recommended by Lessar:

℞ Acidi carbol..... ʒ ss
Ung. plumbi..... ʒ x
Lanolini..... ʒ x
Olei olivæ..... ʒ v
Olei lavendulæ..... ʒ ss

M. Sig.: As a local application.

The following, containing Ichthyol, is of great service in treatment of frost bite:

℞ Ichthyol
Resorcin
Acidi tannici, aa..... ʒ iii
Aq. destil..... ʒ ii

M. Sig.: Shake and apply locally twice daily if the skin reamins unbroken.

Treatment of Arthritic Eczema in Children.

The following is recommended by Comby as noted in *Am. Medicine.*

℞ Sodii bicarb.
Magnesiæ calcin., aa..... gr iii
Pulv. nucis vom..... gr. ½

M. Ft. chartula No. 1 Sig.: One such to be taken before each meal in a teaspoonful of milk.

Local treatment should consist in the application of zinc ointment to which menthol or salicylic acid has been added in small amount. The following makes a splendid combination:

℞ Acidi borici
Zinci oxidi, aa..... gr. xxx
Vaselini
Adipis benzoinatis, aa..... ʒ v

M. Sig.: Apply locally.

And the following as a dusting powder:

℞ Acidi salicylici..... gr xv
Pulv. talci
Pulv. amyli
Lycopodii, aa..... ʒ v

M. Sig.: Apply locally as a dusting powder.

David Harris, former health officer of the diamond fields, South Africa, writes the *Lancet* that he practiced in that region in the early 80s, when malaria was very prevalent there, and he avers the entire absence of mosquitoes. The population numbered about 70,000. With the extension of the railway from Cape Town two or three years later came the first instalment of mosquitoes, but malaria very steadily decreased in his own very large practice and elsewhere in general.

An advantage in prescribing

HYDROLEINE is in giving at each dose a large per cent. of pre-digested Cod Liver Oil. It is palatable, well borne by the most delicate stomach, and improves digestion.

HYDROLEINE (Hydrated Oil) is a pancreatized Emulsion of pure Norwegian Cod Liver Oil, obtained from fresh livers. Its success in modifying all wasting diseases is well established, over 40,000 physicians are prescribing it and 98% of all the Hospitals in New York City and Brooklyn endorse it.

We will send to physicians on application literature on the subject. Sold by druggists.

Manufactured by The Chas. N. Crittenton Co., Laboratory, 115 and 117 Fulton Street, New York.

Newer Materia Medica.

Notes on the Treatment of Cough.

Most practitioners will readily agree that the old remedies, which we have had at our disposal for the alleviation of cough, are not everything that can be desired. The old-time-tried narcotics and expectorants often fail us when needed most, and it is especially in chronic cases, in which cough constitutes the chief discomfort of the patient, that they fail most frequently. In paroxysmal coughs, especially in whooping cough, there has always been a difficulty in soothing the irritable mucosa of the bronchi and in reducing the number of attacks, so as to avoid the weakening effects of the paroxysms, without at the same time drugging the patient with narcotics until the danger line of depression has been reached.

Notwithstanding the evident need for better respiratory sedatives, the chemists have given us a large number of remedies for the reduction of fever, and an innumerable number of substances vaunted as antiseptics, but they have paid little or no attention to the preparation of new therapeutic agents designed to alleviate cough. Eager anticipation, therefore, greeted the discovery of the clinical value of heroin, the diacetic acid of morphine, by Dreser and Floret, in 1898.

Heroin has now been tested in so large a number of cases, reported by so great a number of trustworthy observers, that its status may be accepted as securely established. The sum of clinical and pharmacological experience designates heroin as a respiratory sedative superior in every respect to the older narcotics, and withal devoid of toxic or depressant properties. Its physiological action consists in a diminution of the frequency of respiratory movements, and at the same time in an increase of the volume of the individual respiratory act. The reduction of the tussal reflexes is combined with the relief of pain without the danger of a drug habit, which exists when other opiates are used.

As regards after-effects, we may, I think, accept the conclusions of Manges (*New York Medical Journal, January* 13 and 20, 1900,) based upon a review of the work of numerous writers on the subject, that heroin is not followed by serious effects of an untoward character unless it be administered in excessive doses. My own observations, in a large number of cases, confirm this view. The only collateral effect that I noted in the use of heroin was a tendency to constipation, which is especially prominent in old persons, but in all cases easily combated with mild laxa-

tives. I have not observed vertigo, nor vomiting, after the administration of doses proportionate to age. There is no doubt, however, that, after all, heroin is a derivative of morphine, and therefore is to be used with that caution and judgment, which drugs of this class demand. Fortunately its very efficiency precluded the necessity of administering doses of any magnitude beyond the usual.

Next to the respiratory sedatives, the expectorants are the most essential factors in the treatment of cough. The members of the ammonium group for a long time have enjoyed well-merited preference as stimulating expectorants on the part of physicians. I wish, however, to call attention to one member of the ammonium family that has been most inexcusably neglected — ammonium hypophosphite. Its action is similar to that of ammonium chloride, but it has the advantage of being easily borne by the stomach, and of being more agreeable in taste. I was surprised to find that such a complete work as the National Dispensatory does not mention it, and it has not been received into the Pharmacopœia of this country nor into those of Germany, Great Britain and France. The dose is from ten to thirty grains, and the salt occurs as a white laminous crystalline powder, soluble in water, having the chemical formula of $NH_4PH_2O_2+H_2O$.

There can be no question as to the increased value of a combination of these remedies which embodies so efficient a respiratory sedative as heroin and so trustworthy an expectorant as ammonium hypophosphite, and therefore I determined to try the preparation known as glyco-heroin in the treatment of coughs, with special reference to paroxysmal coughs and chronic, obstinate bronchial catarrhs. In the following very brief histories I have endeavored to give the results of my experience with this preparation which in addition to 1-16 of a grain of heroin hydrochloride to the drachm and ammonium hypophosphite, contains balsam of tolu and white pine bark.

The following cases are taken somewhat at random from my notebooks:

CLINICAL HISTORIES.

1. D. G., aged 7 years. Whooping cough of three weeks' duration. Vomiting with each paroxysm. As many as eighteen paroxysms in 24 hours. Thirty drops of glyco-heroin three times daily. After two days the paroxysms had diminished in severity and frequency and there were no more than five or six paroxysms daily. After four days the vomiting ceased, and the patient began to sleep soundly. The child fet better in every way and was able to play and romp about without producing a coughing spell. Ten days after glyco-heroin was first given the patient had but two or three paroxysms daily, and these were of a mild type. This state of things continued for about ten days longer, when only a slight cough remained. At the end of two weeks the patient was perfectly well.

2. L. G., aged 12 years. Sister of the above-mentioned patient and was seen at the same time. Whooping cough of a more severe type than that in the preceding case. Forty drops of glyco-heroin (equivalent to 1-24 grain of heroin hydrochloride)

three times daily. Similar course as the preceeding case.

3. M. C., aged 21 years. Whooping cough of one week's duration when first seen, the chief complaint being troublesome paroxysms at night. A teaspoonful of glyco-heroin was ordered to be taken four times a day. Within forty-eight hours the patient reported marked improvement. Within one week the cough ceased to trouble him and he considered himself perfectly well.

4. G. V., aged 38 years. Whooping cough of twelve days' duration. A mild type of the disease. Glyco-heroin was prescribed, but proved to be of no service whatever, although the patient took a teaspoonful every four hours for ten days. A change of climate was advised and the patient spent two weeks at Atlantic City; had the desired effect.

5. F. F., aged 2½ years. A severe attack of whooping cough, associated with acute bronchitis. After the administration of glyco-heroin, ten drops three times daily for one week, the little patient was well on the road to recovery. After twenty-five days from the beginning of the cough the patient was perfectly well. In this case there was constipation, which may have been due to heroin.

6. F. H., aged 5 years. Was seen after having been under treatment for three weeks and after she had been taking bromides, belladonna and other sedatives without any results. The cough was markedly worse at night, and the child was restless and peevish from loss of sleep. Ordered 15 drops of glyco-heroin three times daily. After forty-eight hours there was no improvement and the dose was increased to twenty-drops every four hours. At the end of three days the writer was surprised at the marked improvement which had taken place. The child coughed only once in twenty-four hours, and slept well at night. At the end of twelve days she was discharged cured.

7. H. H., aged 8 years. Brother of the above-mentioned patient. The same condition and the same result, but glyco-heroin had to be pushed to 60 drops three times a day.

8. I. A., aged —. Bronchitis of two weeks' standing. Various expectorants and sedatives had been used without any results. A teaspoonful of glyco-heroin given every four hours. In three days the patient reported well.

9. S. O., aged —. Cough of pregnancy. The usual remedies had been tried without avail. Glyco-heroin every four hours, in teaspoonful doses. In forty-eight hours a most marked improvement was noted.

10. A. T., aged 23 years. Cough of pregnancy. Very troublesome. After the ordinary remedies had failed, glyco-heroin succeeded in relieving the cough in a short time. A teaspoonful was given three times daily.

11. S. H., aged 23 years. Bronchitis. Glyco-heroin, a teaspoonful, every four hours. Excellent results after the second day.

12. M. S., aged 21 years. Acute bronchitis. Glyco-heroin in teaspoonful doses, three times daily. Excellent results after two days.

13. P. O., aged 27 years. Winter cough. Very troublesome. The patient gives a history of reoccurrence every winter. The cough was paroxysmal in character and he had taken a great variety of remedies. Glyco-heroin was given in teaspoonful doses, every four hours, and three days later great relief was experienced. The patient was then told to take the preparation twice daily, morning and evening, until the cough disappeared.

14. W. L., aged 5 years. Whooping cough of marked severity. Twenty drops of glyco-heroin were given three times a day, with results similar to those obtained in the other cases of whooping cough.

15. S. W., aged 78 years. Winter cough. The writer has had this patient under treatment for cough every winter for fifteen years. Glyco-heroin showed the best results as compared to all other remedies previously used. In fact, while taking it, the patient has no cough.

16. W. W., aged 73 years. History and results similar to those obtained in the previous case.

17. M. C., aged 81 years. History similar to that of case 15, but no results were obtained from the use of any remedy.

18. M. B., aged 7 years. Whooping cough of two weeks' duration. Although glyco-heroin was used in doses of forty drops three times daily, no results were noted after two weeks' treatment.

19. S. M., aged 7 years. Whooping cough of three weeks' duration. Relieved after six days' treatment with glyco-heroin, in doses of thirty drops every four hours.

Of the nineteen cases reported, there were ten cases of whooping cough in patients ranging from $2\frac{1}{2}$ to 38 years of age. In these the dose varied, according to age, from ten drops to a teaspoonful, in intervals not exceeding four hours. The results were very satisfactory in all cases, with the single exception of case 4, a mild type of whooping cough in a patient aged 38 years, in whom nothing but a change of climate had the desired effect. In the other nine cases of pertussis, there was very prompt diminution of the number and severity of the paroxysms and an improvement in the general well-being of the patient. These effects were all the more noteworthy as they are rarely seen in pertussis on the administration of any other sedative remedy.

In the three cases of subacute bronchitis, the results were so prompt as to astonish the patients themselves. With due care the continuation of the catarrhal process into a chronic state was avoided.

In the two cases of coughs, occurring during pregnancy, glyco-heroin proved very efficient. Of all forms of cough, sedatives are most urgently indicated in the irritable condition of the whole system which obtains in the pregnant state. In glyco-heroin I found a palatable combination which at the same time is free from the depressant properties of the other opiates.

There were four cases of chronic bronchitis, the age of the patients ranging between 27 and 81 years. As has been noted by other writers, heroin is not so well borne by the aged as it is by the young. The dose must therefore be kept down in old people, and it is for this reason that in one of the cases, No. 17,

in which the patient was 81 years old, no results could be obtained. In contrast to this case stand the other two instances of heroic bronchitis in the aged (persons aged 73 and 78 years respectively), in which the effect was all that could have been wished.

In conclusion I will say that while there probably never will be a remedy which will act with equal efficacy in all cases, the results which I obtained with glyco-heroin in a number of difficult and obstinate cases of cough enable me to express myself as fully satisfied that it is an efficient respiratory sedative and expectorant.

The Best Alkaline Wash.

By W. Harpur Sloan, M. D., Philadelphia Pa., Chief of Ear Department, Medico-Chirurgical College.

There are many alkaline preparations on the market that are used daily and varied results in conditions where such a preparation is indicated. I have tried most of them in all conditions, and after an impartial trial, I am compelled to say that the preparation known as glyco-thymoline, made by Kress & Owen Co., stands at the head of the list; its formula is one that would commend its use, the ingredients being of an antiseptic and non-irritating nature.

Having formed this opinion of glyco-thymoline, I submit a report of a few clinical cases where it has given me good results.

Case I.—M. L., aged 26 years, came under my care suffering with a distressing case of ozena. The turbinated bones on both sides of her nose presented a condition of marked atrophy; there was a complete loss of smell and taste, and a formation of crusts in the nasal chamber, and stench of same was foul. She complained of continual headache and other symptoms of a depleted and run down system. I placed her on a tonic of iron, arsenic and strychnia, internally; locally, I ordered the use of glyco-thymoline in a Bermingham douche, three times a day, diluted. After a month's treatment the crusts had ceased to form; there was a complete restoration of taste and a slight return of smell; the general health was improved, and the patient herself well satisfied with results.

Case II.—C. A., aged 8 years, came to me suffering with a severe otorrhea following scarlet fever. There was a muco-purulent discharge from both ears that rendered the child completely deaf; the auditory canal was excoriated and sore, and the general health below par. I used cod liver oil internally, and syringed the ears three times a day with glyco-thymoline. At the end of one month the discharge of pus had stopped; the hearing much improved, and the child's general health very much better.

Case III.—J. W., aged 25 years, came under my care suffering with an aggravated case of cystitis, which had been treated by several of our best physicians, without much improvement. He had great pain in the region of the bladder and loins, which became worse on urination; a heavy deposit of mucus and some blood in the urine made his condition more distressing; his temperature was 100 degrees, which would rise a degree during the periods of pain. I used the usual treatment for such cases without positive results, when

I thought of irrigating the bladder with glyco-thymoline (dilute). This I did once in the twenty-four hours, at the same time giving glyco-thymoline internally in teaspoonful doses every three hours. For the first two days I did not see much improvement; on the third day there was no blood in the urine and less mucus. I continued this treatment for two weeks, when I discharged him cured.

Case IV.—J. H., aged 35 years, consulted me for pruritis ani which had troubled him for several years; his business compelled him to sit the best part of the day. He had used various ointments, prescriptions, and the like, for this troublesome affection, with only temporary relief. At his first visit I ordered him to bathe the rectum twice daily with castile soap and warm water, then to apply glyco-thymoline, half strength, to the parts. After persisting for a time, the swelling and severe itching was lessened, and soon ceased altogether.—*Buffalo Medical Journal.*

Effects of Close Shaving.—A writer in the *Medical Classics* looked through a microscope at a closely shaved face, and he reports that the skin resembled a piece of raw beef. "To make the skin perfectly smooth requires," he says, "not only the removal of the hair, but also a portion of the cuticle, and a close shave means the removal of a layer of skin all around. The blood-vessels thus exposed are not visible to the eye, but under the microscope each little quivering mouth holding a minute blood drop protests against such treatment. The nerve tips are also uncovered, and the pores are left unprotected, which makes the skin tender and unhealthy. This sudden exposure of inner layer of the skin renders a person liable to have colds, hoarseness and sore throat."—*The St. Louis Medical and Surgical Journal.*

The Famous Asphalt Lake.

Asphalt is being dug out of the famous tar lake of Trinidad—the most notable existing source of the material in the world—at the rate of eighty thousand tons per annum. There are still four and a half million tons in sight, but at this rate the supply could not last long, were it not that the lake of bitumen referred to is receiving a constant accretion from the bowels of the earth. This accretion is reckoned as amounting to about twenty thousand tons yearly, and would suffice to restore the lake to its original condition if it were allowed to remain undisturbed for a few years.

This wonderful lake of pitch has an area of one hundred and fourteen acres, and recent soundings made in the middle of it have shown its depth to be one hundred and thirty-five feet in that part. Near the centre it is semi-liquid and bubbling, but elsewhere it has so hard a surface that a man on horseback can ride over it without danger of breaking through the crust. Scattered over its surface are a number of small islands which have no proper roots in the earth, so to speak, but are composed merely of accumulations of soil, though trees of considerable size grow on some of them. These islands are not stationary, but are carried slowly from place to place by the movements of the lake. Now and then one of them is entirely engulfed.—*The Saturday Evening Post.*

Manilla Peculiarities.

A capable newspaper correspondent, who has lived in Manila, writes from that city, in an illustrated article published in *The Outlook,* that acquaintance with Manila lessens objections to it. "It grows on one like vice or an acquired taste. The few natives whom whites meet in business or socially are courteous, quiet, likable people, even if whites never feel sure about trusting them. Native habits are not offensive. Everybody gambles and fights chickens, but both of these pastimes seek reasonable seclusion. There is no intemperance. Cafes and saloons do not obtrude their smells and noises on all sides, as in Havana. An American wonders at the few drinking-places until he learns that they cater only to his own kind, who constitute about three per cent. of Manila's population, and not more than four per cent. when soldiers flock to town. Natives keep to themselves. They do not gather in street crowds, except for church processions and fiestas celebrated in daylight. After dark they prefer the quiet of their homes, where friends may drop in and enjoy a nibble of sweets and music.

"Soil, sun and bounteous rains make amends for human neglect by garments of waving green, rich with blossoms, which they spread profusely about the yards and houses. There are lovely pictures almost everywhere. When Manila shall learn modern ways, and become prosperous enough to induce the public improvements which it needs, and to popularize fresh paint and tidy habits among householders, it may be no longer mockery to call it Pearl of the Orient."

Medical Advertisements in Newspapers.—If the remedies are harmless and will not accomplish the results covertly claimed for them, then they are frauds and humbugs of the most villainous kind; on the other hand, if they are efficacious in the manner intended, then their sale and use is criminal and the newspaper that admits such advertisements is a participant in the crime. The editor can take whichever horn of the dilemma he chooses; in advertising such remedies he is either selling his space to humbug people or is allowing the space to be used for criminal purposes. He cannot plead ignorance. When certain pills are advertised as "monthly regulator; safe and sure; never fails;" and when the advertiser says, "send for woman's safeguard," there is no doubt as to what is meant. The editorial apology is pitifully weak, not to call it anything worse. "Money talks" altogether too much with the advertising department of the daily press, and morality and even common decency must take a second place.—*Journal Am. Med. Association.*

Surgeon Harris, of the U. S. cruiser Albany, in report to the surgeon-general of the navy with regard to the condition of his ship, says that from a sanitary point of view the Albany is so radically wrong as regards construction that it is almost impossible to relate in detail the necessary changes which will have to be made before this ship will become a sanitary vessel.—*Medical Age.*

The Treatment of Nasal Catarrh.

Mannon (*Cincinnati Lancet-Clinic*) finds no danger whatever from the use of the nasal douche, provided ordinary care is taken and

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a proper solution is employed. The charge that post-nasal douching is prone to excite inflammation of the middle ear he does not find sustained. All leading specialists employ this method of treatment in the posterior as well as in the anterior nares with equally good results. The doctor has had chronic nasal catarrh of many months duration yield to douching when heroically employed. Listerine, to which a small quantity of bicarbonate of soda has been added is his main stand-by. If hemorrhage is a controlling feature he uses instead a saturated solution of tannic acid to each ounce of which ten grains of carbolic acid has been added. When the tendency to bleed ceases he returns to the listerine solution. Treated in this way the most pronounced cases yield in three or four weeks and are not prolonged by complications or sequelæ.

Respecting Pepto-Mangan (Gude) I will inform you that I have been well satisfied with its action in all cases in my practice. The patients willingly took the preparation on account of its agreeable taste. Unpleasant after-effects upon the stomach, or as regards the teeth, were not observed in a single instance. In all cases its use produced within a short time a considerable improvement of the appetite, and an increase of strength as well as a better appearance of the patients. Anæmic patients were especially grateful for the rapid disappearance of the headaches, so that in these cases I frequently prescribed the preparation.

DR. PAUL KELLER.

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Membranous Croup.

Dyphtheric, or true croup, is probably the most fatal disease of childhood, one which kills with such rapidity, and where our best remedies prove of little avail, that it is not strange that the medical attendant feels helpless when called to treat a case of genuine croup.

Theoretically, many of our standard prescriptions ought to relieve, but on trial prove to be failures. To witness the gasping and struggling for breath, and other symptoms caused by impeded respiration and imperfect oxidation of the blood, and the inability to help the sufferer, is unpleasant and appalling to any physician.

During a practice of fifteen years, I have attended quite a number of such cases, with a mortality of 80 per cent. Last winter I treated two cases and both recovered.

Case 1. A. F., male, aged 22 months, for two days previous to my first visit had what the mother supposed to be a hard cold. I found the child's temperature 102 degrees F., pulse 135, appetite poor, bowels con-

stipated, and urine scanty, obstructed respiration, and the peculiar cough characteristic of croup. With the exception of a few bronchial rales, the lungs appeared normal.

Treatment: One-tenth grain calomel every two hours until bowels moved freely; one-half grain quinine sulphate every four hours; tartaric ematic and bichromate of potash, each one one-hundreth grain, every two hours. External applications of turpentine, one part, and olive oil, five parts. Also had room saturated with the vapor from a dish on the stove, containing boiling water, to which we added several times a day a tablespoonful of a mixture containing equal parts of carbolic acid, turpentine, and oil of eucalyptus. The next morning I found the patient's condition about the same. Treatment continued.

At 8 p. m. the father came for me (eight miles in a severe snowstorm), saying the baby was in such a low condition that I should probably find him dead when I arrived. Beside my regular medicine bag, I also took a tracheotomy tube and a vapo-cresoline lamp. The little sufferer seemed to be beyond aid, and the end was near; nevertheless I succeeded in having him swallow one two-hundredth grain glonoin, and in a few minutes an emetic of ipecac, erected a sort of a tent about the cradle, lighting the vapo-cresoline lamp, and placing it on one side, fixing a newspaper so that the vapor must draw across the child's face, leaving a small outlet on the other side of the tent.

In less than an hour the child became uneasy and vomited quite a quantity of mucus, and several pieces of membrane, the largest measuring

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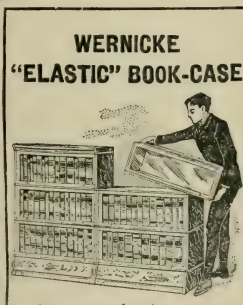

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three by one-half inches. This gave him some relief, and the breathing became somewhat freer. Keeping up the vapo-cresoline, I prescribed the dark iodide of lime, one-quarter grain every hour; sulphate of quinine, one-half grain every four hours, and one-half teaspoonful of whiskey every two hours. For nourishment, bovinine and milk.

In forty-eight hours improvement was so marked that the above treatment was stopped, syrup hypophosphite compound and syrup hydriodic acid substituted.

Case 2 occurred a few weeks later, and was similar to the first one. Profiting by my previous experience, we at once started the vapo-cresoline, and giving quinine and iodide of lime, as in the other case, also a laxative, and turpentine and oil applications to chest and throat. Although he was in a precarious condition when treatment was commenced, he improved so that by the third day we considered him out of danger.

In my opinion the vapo-cresoline was an important factor in the cure of these cases, as well as in whooping cough, having used it considerably in an epidemic, some years ago, with benefit.

I think we are prone to change medicines too often in all kinds of diseases, expecting too quick results, and not having patience to give a certain line of treatment a thorough trial. From experience, I find that cases of pneumonia, typhoid fever, and many other diseases will do better (exceptions are rare), on a plan of treatment laid out during the first few days, than by daily changing medicines. By this I do not intend to convey the idea to use a stereotyped treatment in all cases, but a careful study of each case at start, and then decide on a line of treatment, treating complications as they arise.

Antikamnia and Heroin Tablets in Dyspnœa.

Thos. G. Rainey, M. D., L. R. C. P., resident physician British Medical Institute, Atlanta, Ga., in a recent article, states that the comparatively new combination of drugs, antikamnia and heroin tablets, which has been so largely used for the control of cough, is also being successfully employed, to a large extent, in the treatment of nearly all affections of the respiratory tract, which are accompanied by dyspnœa and spasm, namely: asthma, bronchitis, laryngitis, pneumonia, phthisis, whooping cough, hay fever, la

grippe, etc. In cases in which the patients were suffering from the severe attendant pain of these diseases, it was found that this combination acted most satisfactorily. Each tablet contains five grains of antikamnia and one-twelfth grain heroin hydrochloride. One tablet was followed by a rapid diminution of pain, and after the third tablet the pain entirely disappeared. In treating the affections enumerated above, the dose is one tablet every two, three or four hours according to indication.

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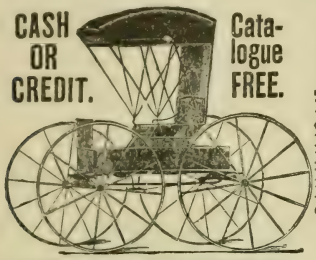

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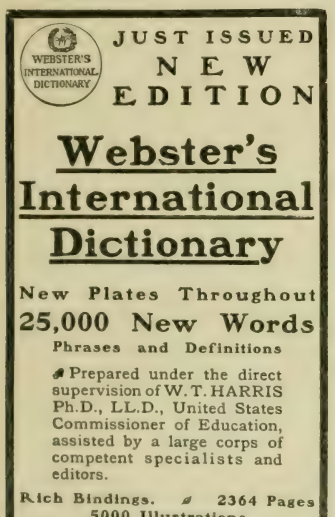
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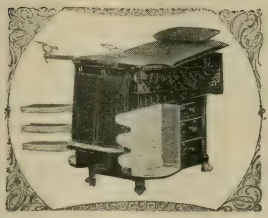
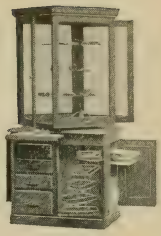

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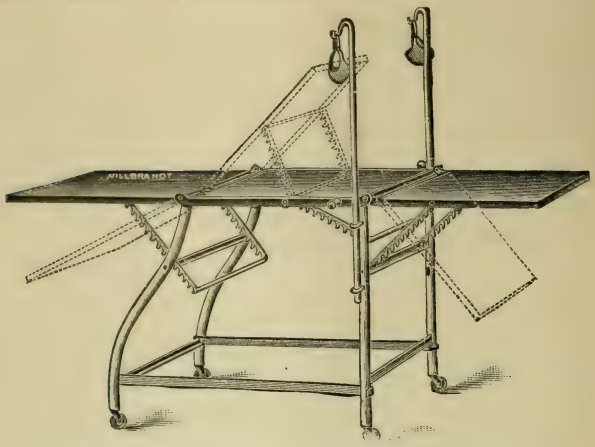

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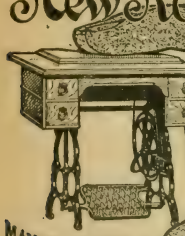

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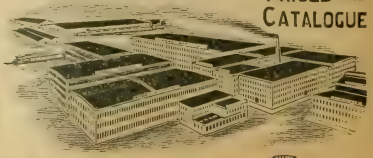

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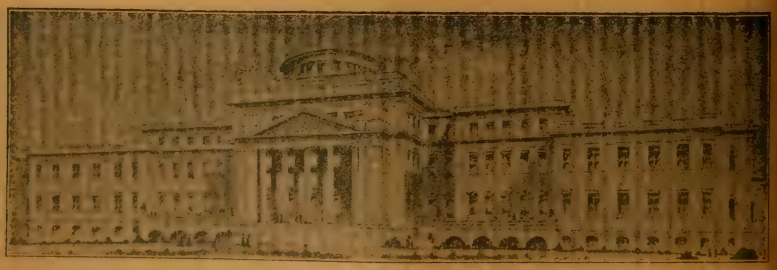

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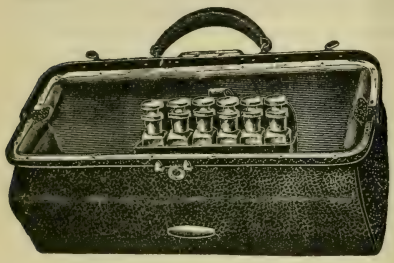

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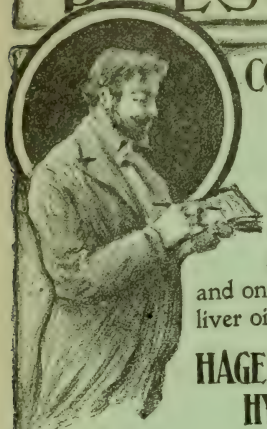

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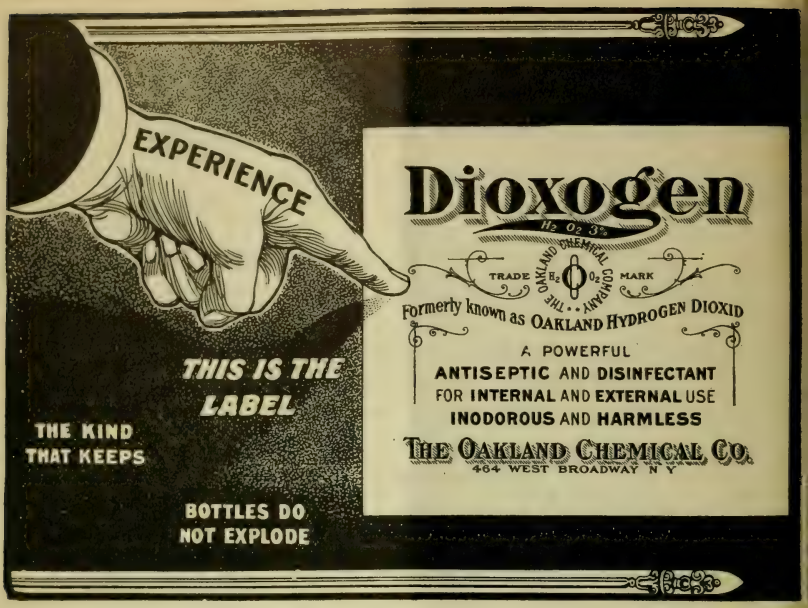

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As many as half a dozen dead bodies have been seen by prospectors in a single hovel and numerous dead bodies were seen lying about on the ground partly eaten by the foxes.

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VOL. XLVIII. CHARLOTTE, N. C., FEBRUARY, 1902. No. 2.

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EDITORIAL.

DECLINE IN BIRTHRATE.

There is no reliable data available for comparison for this country as a whole, as very few States have adopted any system of registering births, and in the United States census reports, no attention is paid to this question. In several States, however, there has been kept a fairly reliable record and it is from statistics furnished by these States that has been formed the basis of an interesting paper upon this subject by Dr. Geo. J. Engelmann, of Boston. We must confess that these statistics and the conclusions drawn therefrom are somewhat alarming. Since the New England States and one Western State, Michigan, have furnished the only reasonably accurate basis for these conclusions, they cannot be said to apply to the country as a whole. It is a well-known fact that since 1870, there has been a steady decline in the birth-rate of most European countries. It is not unnatural then, that the United States should have shared in this decline. We were unprepared, however, for the statement of Dr. Engelmann that the birth-rate of the native-born Americans in every State is far below that of France, the lowest of all European countries; and that it is the higher birth-rate of the foreign population, higher, even, than that which obtained in their own country, which establishes the equilibrium. This is true not only of effete New England, but even of so young and prosperous a commonwealth as Michigan, where it is said that "in view of the best statistical evidence obtainable it appears that the native population of

Michigan does not afford enough children per marriage to maintain itself intact."

The birth-rate of the different European countries as given by reliable statisticians for 1890-1894 per 1,000 living population is, Russia 48.5, Austria 37.2, Prussia 36.9, Italy 36.3, England and Wales 30.3, France 22.4. While in Massachusetts among the native-born the rate is 17.3, while in the same State, among the foreign population it is 52.16; in Michigan, among the natives it is only 12, while the foreign-born show a rate of 37. It is easily seen by the above figures that the rate of birth per 1,000 population is not equal to the mortality rate in those two States. If, therefore, these figures be taken as representing the actual facts in the case, the native American is in far more danger of extinction than is the much pitied Frenchman. When we furthermore consider the actual preponderance of the foreign-born citizen over the native-born, in most of the great centres of population, the promised paper by Wilbur, on the "Passing Away of the Native American" will be received with interest. This numerical superiority of the foreign element is thus stated by Wilbur:

"In many States the Americans are largely in a minority. In Minnesota they form less than 22 per cent. of the total population; in New York, Massachusetts and Michigan they are less than 45 per cent. and in many of our large cities the proportion of foreigners and their children is so great as to completely overbalance the American contingent. In Milwaukee only 13 per cent. are native American, the remainder being of foreign nativity and descent. New York, Chicago, Detroit, San Francisco, Buffalo, St. Paul, Cleveland, Jersey City, St. Louis, Cincinnati, Brooklyn, Pittsburg and Boston have not over 30 per cent. native inhabitants." And thus, adds the same author, we see a race endangered, "the perpetuity of that race of men who planned the principles of civil and religious liberty upon this continent, who gave us the constitution, and who preserved the integrity of the young republic in its long struggle for liberty."

This is a somewhat gloomy picture to place before the American who is just now possessed of the idea of conquering the world commercially, and who steadfastly believes his country is destined to occupy at no distant day an undisputed primacy among the nations. To think that before he has accomplished these great ends he and his kind will be numbered with the dodo and the great auk; his skull an object of curious interest to the ethnologists of more prolific races. We must confess that our personal observations and experience in this section of the planet earth does not coincide with Dr. Engelmann's statistics for New England and the great State of Michigan. Appearances may be deceptive, but they are certainly not indicative of an early extinction of the native American in the Southern States.

VISUAL DEFECTS IN RAILROAD EMPLOYEES.

The strenuous demands of modern railroading requires a high degree of physical perfection on the men thus employed, with the gradual

increase of speed being attained by the best class of trains, and the intricate system of management in these later days, necessitates not only the physical, but mental qualities in engineers and the like, far above the average. Among the physical qualifications which have long been recognized as essential to a certain class of trainmen, is a visual and auditory apparatus up to the standard, and a normal color perception. The majority of railroad companies have instituted a partial system of examinations to which new and old employes are subjected. The requirements of the different roads are by no means uniform, and hence there is no fixed standard. This necessarily leads to confusion and is, to say the least, extremely unscientific. The adoption of a standard, however, envolves considerable difficulty, as was found by a committee appointed by the Ophthalmological Section of the American Medical Association. After several abortive attempts the committee finally made a report at the fifty-second annual meeting. This report, with some objection, was adopted. The report recommended that all railroad companies shall require a scientific and correct examination of the eyes and ears of all their employes who are actively engaged in operating trains or receiving or giving signals. Two standards were suggested, one for new men hoping to enter the service as trainmen, and one for old employes, or those having been in company's service for a period of five years. The standard for the new men is naturally higher than that for the old employees, and these former are required to have a visual acuity of 20-20 in each eye without glasses. The standard for old employees is furthermore subdivided so as to require a different degree of visual perfection in the several classes of employes; that for class A, to which engineers, conductors, etc., belong, being higher than class B, which embraces bridge foremen, crossing flagmen, station agents and son on. All employees, however, are required to have a perfect color sense. Re-examinations are to be made every three years, or after severe accidents or illness.

The report will next be laid before the proper railroad authorities.

A NEW FACTOR IN THE ETIOLOGY OF MALARIAL FEVER.

The study of malarial fever is always interesting, especially to the medical profession of the South, and any suggestion leading to a better understanding of its cause, and treatment, will always attract attention. In view of the investigations and experiments which have demonstrated so conclusively the causative relation of the mosquito to this wide-spread disease, the great majority of the profession have abandoned the atmospheric and water theories, though these, in their day, seemed conclusive. After the introduction of malarial parasites into the human organism, what influences the periodic sporulation of the successive groups, thus causing the outbreaks of fever?

Dr. A. F. A. King, of Washington, D. C., contributes a paper in the *American Journal of the Medical Sciences* for February, 1902, in which he advances the suggestion that light bears an important role in the sporulation of the malarial para-

site. As bearing out this idea he makes the following statements:

1. The accumulated experience and observation of centuries, which have been held to prove the agency of solar heat in causing malarial fever, may be held to prove the agency of solar light.

2. Paroxysms of intermittent fever will not, as a rule, take place at night, in the dark.

3. The relative liability and relative immunity of different races of men to malarial fever depend upon the relative translucency or non-translucency of their skin, and probably of their blood.

4. In places where malarial fever prevails, the disease is increased by bright, sunny weather, and lessened by clouded skies.

5. It has long been a popular tradition that to prevent the occurrence of ague, or to forestall its recurrence where it has once occurred, it is advisable to keep in the shade and avoid sunlight.

6. The malarial parasite is a naked amœba. Red light promotes the vital activities of amœbas, while violet or purple light restricts them. The color of the light diffused through the blood is necessarily red.

To uphold these statements he cites the views of various writers bearing upon the influence of solar heat, and the heat and light of the sun are inseparable.

We cannot accept the solar heat theory, for the malarial parasite cannot be affected by external temperature, for while submerged in the blood of a healthy human "host," it has an unvarying temperature of 98.2 degrees F.; and in a malarial patient while the temperature during the paroxysm may reach 104 to 106 degrees F., it is, during the much longer intermission, usually subnormal. While the black man is more immune, his black skin absorbs more heat than that of the white man. While we cannot conceive how external heat can warm the parasite in human blood, there seems no difficulty in believing that light can penetrate the skin and act upon the plasmodium to promote its development—as light is known to act upon other amæbæ. An examination of over a hundred negroes to determine the transluciency of their skin showed that light passed through the skin almost as readily as through the skin of a white man. In only three very dark negroes was the skin found absolutely impenetrable to light. We know that many negroes in this country suffer from malaria. No white skin is impenetrable by light, and immunity in a white person is, so far, unknown. Whether the blood of the negro in the tropics is too dark to admit light may be worth investigating. Many references are made to the beneficial effects of rainy days on outbreaks of malarial fever, but he good effect is attributable to the "sultry rains" and not to a clouded sky.

Osler, Thayer and others affirm that intermittent fever is spontaneously curable without medicine; but in these cases of spontaneous recovery the patients were, presumably at least, shaded by their hospital surroundings, from the light of the sun. We know that the effect of quinine in preventing a paroxysm of malarial fever is greatly enhanced by keeping the patient in bed.

Harrington and Leaming claim

the following effects of color upon amæbæ:

1. Amæba streams in the presence of red light.

2. Streaming is retarded, stopped or reversed by rays from the violet end of the spectrum.

3. Further, the effectiveness of the following kinds of light as inhibitors of protoplasmic flow diminished in the order named—white, violet, red.

4. Enucleated amœbæ stream in red light and cease to stream in violet or white light.

We may find here the cause for the influence of methylene blue in inhabiting protoplasmic movements in the malarial parasite. If methylene blue stains the parasite or its nucleus, this blue, commingling with the red of the blood, would produce the disastrous (to the parasite) violet or purple. It may also explain the curative action of sulphate of quinine, which in solution intensifies the violet, and even renders the ultra violet rays of the spectrum perceptable to human vision.

Finally, if this theory be proven correct, will the future treatment of malarial fever include keeping the patient in the dark, or in rooms with purple or indigo windows, and clothe them with garments impenetrable to light, and give drugs that darken the blood or render it violet or lesen its transluciency?

The prevailing epidemic of smallpox seems to be worldwide. More than seven hundred cases are reported in London hospitals, forty-two being admitted in one day. The number of cases in the hospitals has been on the increase for a number of weeks. As is well-known, the disease prevails all over the United States. The difficulties in diagnosis which occasionally confront the attending physician sometimes lead to the most lamentable mistakes, and an instance is reported where twenty people were infected from one person, the disease not having been properly diagnosed for several days.

Of course, the most frequent cause of error is chickenpox, and on this account in some localities varicilla has been made a notifyable disease.

The statement of Dr. Koch in his London address regarding the dissimilarity and non-communicability of bovine and human tuberculosis, has not only aroused a multitude of dissenting voices in all parts of the world, but the distinguished bacteriologist has been quoted against himself. *The British Medical Journal* contains an article by Dr. Alfred Hillier, which quotes a paragraph from Koch's original and now classic essay upon the subject, and in which Koch makes the statement entirely conflicting with his latest utterance. The quotation, which is given below, sets aside his claim that up to the time of the London meeting Koch had never been decided in his views upon this important matter. The extract reads as follws:

"But the perfect identity and unity of the tuberculous process in different kinds of animals *can not be doubled* when attention is diverted from the macroscopic condition of tuberculous organs and from the secondary changes in them, as caseation and calcification, to the primary structure of tubercule, which, as we have already seen, recurs with typical regu-

larity in all the different processes in man, and such is the case also in the apparently widely different forms of tuberculosis *in the various species of animals.*"

The Chief Horror of Smallpox.

We commend to the consideration of the profession the following letter to the editor of the *Medical Record,* New York.

Sir: Only yesterday one of the leading dailies of New York City, the *Herald,* very properly directed attention to the "chief horror of smallpox." It consists of not the disease itself, but in the way the unfortunates who are attacked with it are taken care of, by reason of the laws now governing the Health Department of this city. As soon as a case is recognized as one of smallpox, the patient is transported to North Brothers' Island. If the case is a suspicious one, the patient is taken to the Reception Hospital for Contagious Diseases, until the diagnosis is definitely determined. These rules have been established, and are carried out, for the public good, even though it is clear that great mental distress is caused not only to the patient, but also in greater measure, to the nearest relatives. Let me ask, is the law as it now exists either right or necessary? I do not believe it is. In the first place, the only persons who contract real smallpox are those who have *not* been successfully vaccinated. Those who have been successfully vaccinated may take varioloid, but they do not take smallpox. They take in realty a very mild and never fatal form of the disease. The reason why such persons are isolated is merely because they can give smallpox to those persons who have not been successfully vaccinated. Are the former persons, then, to be made victims of the law because silly, ignorant, incorrigible people will not partake of the sole protection to them from a virulent disease? To my mind, that is not right or just. Again, varioloid is no more contagious than scarlet fever or measles, and is not, in realty, as grave a disease as either. Why, then, not treat it with just the same precaution and under the same conditions that we treat the latter? I see no reason why not. The law of New York City does not at present make it *compulsory* to be vaccinated or revaccinated at stated intervals. In my judgment the law should be made compulsory, and the sooner the better for all. In Germany, where such a law is compulsory, there is practically no smallpox. The great and urgent importance of this subject prompts me to write this letter.

Beverly Robinson, M. D.
42 W. Thirty-Seventh street.

The habit of cocain eating seems to have spread extensively, says the *Lancet,* among the natives of Bengal. It is sold in small paper packets, containing half a grain or one grain, which are obtained for half an anna or one anna respectively. It is impossible to say how much is consumed by any one individual, but several grains a day have been confessed to. The sense of feeling well is followed by depression, but the habit appears to be peculiarly seductive, and once commenced is with the greatest difficulty abandoned. A blackening of the teeth is said to be caused by cocain eating and blackening is thought to be characteristic.—*Medical News.*

The Carolina Medical Journal.

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Timely Suggestions.*

By Jacob Deutsch, M. D., Memphis.

The official report of the autopsy nd the real cause of the death of our uch-lamented President, William cKinley, reads as follows: "Gan-rene of both walls of the stomach nd pancreas following gunshot ound."

Autopsies scientifically conducted e of great value, not only to the edical profession, but they are also great benefit to the human family large. A post mortem examina-on will not only reveal the real cause death; it will either confirm, or will correct our diagnosis at the ck bed, but it will also enlighten ie surgeon and the medical man of ossible errors and omissions in the eatment of the case, to be avoided the future in other similar cases.

*Read before the Tri-State Med. Assn. fiss., Ark. and Tenn.) Memphis, Nov. , 1901.

Despite the great strides and advances of the medical science in all its branches, especially during the latter part of the nineteenth century, we have to acknowledge that medicine, and to some extent also surgery, is not as yet an exact science; it is more or less empirical. Long years of experience in practice will therefore greatly assist the practitioner to operate with greater skill, and more successfully combat and cure a disease. The writer, a humble general practitioner, has not the remotest intention to criticise the most able talent and the attendants to our late President, he merely calls to your kind attention his suggestions in gunshot wounds in the stomach and in the intestines, whereby he hopes to have the mortality rate considerably lowered. His first idea in form of suggestion in treating stab wounds, and especially gunshot wounds in any cavity of the human body, and

particularly into the chest and abdomen, is the time-honored expectant plan and conservatism. There are numerous cases on record, where stab and gunshot wounds in the stomach left to nature, ended in perfect closure of the orifice and healed up, *id est,* by forming a circumscribed peritonitis and exudation, which walls in the wound and seals it up hermetrically. We call that process *vis medicatrix naturae,* which the surgeons ought to imitate.

The term "gangrene" is applied to the death of the living tissues, and the immediate cause of the local death is deprivation of an adequate supply of nutritive material. We experience gangrene, that most dreadful sequel, mostly after amputation, despite all antiseptic precautions, when either not all necrosed and lacerated tissues have been removed, or when the stitches in the stumps are applied too tightly, and the more so in wounds of the stomach, on account of its anatomical and histological condition. The walls of the stomach, when deprived of sufficient blood supply, will necessarily become necrotic and gangrenous, on account of formation of stasis and thrombosis in its blood vessels.

Pepper, in his System of Medicine, defines gangrene as "a pathological condition consequent upon interference with either the inflow or outflow of blood in the wounded part, *or below it,* and such interference with the circulation by plugging or ligation of blood vessels, or occasionally by constriction of badly applied sutures and dressings, in consequence of which stasis occurs in the vessels of the affected area on account of the pressure exerted by the effusion and exudation upon the arteries and veins of the adjacent parts, thereby causing gangrene or modifications." The writer is therefore of the opinion that surgical interference in gunshot wounds in the stomach is only indicated where there is strong suspicion of evidence of considerable hemorrhage in the cavity of the abdomen or of laceration of some intestina coils or collapse. Here laparotomy with *prompt resection of the lacerated coils,* or in wounds in the wall of the stomach *through excision o the contused and necrotic edges, before applying stitches,* is then th very best and safest procedure. Sutures, however, carefully placed i contused or necrotic tissues, will onl cause additional injury by infectin the surrounding healthy tissues, an will only lead to septicemia or gan grene. Small bleeding in the ab dominal cavity does not require lapa rotomy. The great absorbent capac ity of the peritoneum, reinforced b the great army of phagocytes, will i most cases dispose of the blood or e traneous matter, and even if th blood should be present there some larger quantity, we know th in a great many instances blood w eventually become encysted ar thereby comparatively render harmless.

In his address some months ag before the British Medical Associ tion on "Some Surgical Lesso from the Campaigns in Cuba, Sou Africa and the Phillipines," S Wm. Thomson discoursed on t subject of gunshot wounds in the a domen, and proved that the conserv tive treatment in these cases result in more recoveries than does the i mediate opening of the abdomen a

earch for injuries of the intestines. He recorded that cases where undoubtedly the stomach and other intestines were perforated, recovered without laparotomy; except in cases where great internal hemorrhage, etc., was suspected, it was wise to pursue the conservative course. He also expressed himself as opposed to the search for the lodged bullet unless such give rise to trouble. The outcome was in most cases favorable, and absence of such infectious diseases as tetanus, pyemia and gangrene was noted.

The late Prof. Nussbaum, surgeon-general of the German army in the Franco-German war, 1870 to 1873, stated in one of his lectures to his class at the University of Munich, "The fate of the wounded rests in the hands of the one who applies the first dressing."

Dr. G. W. Penn, of Humboldt, Tenn., in a communication to the *Philadelphia Medical Journal,* October 12th, 1901, relates a similar case of gunshot wound, which healed by the expectant plan of treatment. He concludes as follows: "As one of the lessons of the President's case, would it not be well in such wounds to first excise the necessarily contused and possibly infected edges elliptically, much as an ulcer might be excised, before uniting by sutures? Would gangrene of the stomach have been so likely had this been done?"

Another: "Chicago, Oct. 4, 1901. A man suffering from the same kind of wounds as were those of McKinley, is at the St. Elizabeth's Hospital. Peter Arp attempted suicide and shot himself through the stomach. Instead of closing the wound by sutures, as was done with the President, it was left open to prevent gangrene. No solid food was given him for some weeks, and the man recovered."

In connection with the expectant plan, we must also take into consideration the effect of shock on the nervous system, on the heart and on the blood vessels, primarily produced by the assaulting weapon, knife or bullet. As much as we know of shock, we define it as a paraletic condition of the vaso-motor system, and especially of a paresis of the nervous vagus, due to a general exhaustion of the nervous centres consequent upon an extremely violent impulse, which is followed by more or less thickening of the blood, according to the severity of the lesion.

We have also to take into consideration idiosyncrasy, or susceptability of some individuals to the bearing and effect of an injury, shock, hemorrhage, anesthesia and surgical operations. As a rule women will stand and survive all these ordeals better than men, elderly men in particular. It is a well-konwn fact that general anesthesia in persons with a weak or diseased myocardium is not only badly borne, but the effect of the anesthesia will even some days after its administration prove fatal.

Surgical interference, as laparotomy, closely following the primary injury, will most necessarily give rise to additional shock, which will greatly interfere with the natural healing process and will even eventually menace the life of the patient. Surgical interference in shot and stab wounds in the abdominal cavity shall therefore only take place upon strong evidence of internal hemorrhage or of laceration of intestinal coils.

The fourth of these suggestions is more of an appeal to you, to the medical profession at large and to the men in the laboratory, to find out any material substance or compound, preferably of an absorbent nature, which substance applied on a wound of the peritoneal surface of the stomach, large or small intestines, to the gall bladder or to the peritoneal portion of the genito-urinary organs, shall have the effect of hermetrically closing up such wounds and to dispense with the harmful stitches, leaving it then to nature to heal such wounds.

We are all acquainted with the healing properties of collodion with or without iodoform in superficial wounds.

A zinc oxide antiseptic plaster will replace sutures in most of the minor surgical wounds; it has even been found effective to bring union after minor surgical operations.

You all know the value of the Murphy button—in fact the beneficial action of the Murphy button has now passed the experimental stage, and it is gratifying that since a few months the button is improved now by an absorbent material.

During the last two years experiments have been conducted at the Vienna, Austria, surgical clinic, under Prof. Gersuny. There it was found and practiced since with unfailing success, that paraffin (white vaseline) injections into cavities of organs in the body caused, either on account of natural defects, holes or depressed scars, promptly replaced the original bones and tissues in functional and cosmetic way; for instance the gap in cleft palate, also filling out the space after resection of bones, or after enucleation of the testis, and in a score of other defects. It is to be hoped, therefore, that in no distant time a material will also be found, which applied on the surface of any peritoneal wound, will close that wound properly and will thereby replace the suture and its evil effects.

To sum up, the writer suggests:

1. To use as much as possible the conservative plan in stab and gunshot wounds in cavities of the body, particularly in the abdomen.

2. To relieve and to minimize the baleful effect of the shock with all the means at our command.

3. If laparotomy is strongly indicated, then not to omit to resect or excise the lacerated and contused parts and edges of the wound.

4. Finally, an appeal to find out any material or substance which will promptly replace sutures to the intestines.

How many valuable lives could annually be saved, if such a substance could be found to replace the sutures.

How many thousand stricken down with stab or gunshot wounds in the abdominal cavity, also cases of perforating ulcus ventriculi or perforating ulcers in consequence upon typhoid, typhus abdominalis, dysentery, and perforating ulcers due to tuberculosis of the intestines, could then be rescued from an early death. —*Memphis Medical Journal.*

The Throat and Nose in Scarlet Fever.*

W. CHEATHAM, M. D., Louisville, Ky.

Thinking the subject has received too little attention from the general

*Read before the Kentucky State Medical Society.

profession, is the apology I offer this body for the short paper I present today. We all know that the first symptoms of scarlet fever are in a large majority of cases found in the throat; that infection is more often through the throat than any other part of the body; that scarlet fever is produced by scarlatinal virus, whatever that may be; that streptococcus pyogenes, staphylococcus aureus, with other pus producers and toxins, the diphtheria bacillus, one or all of these factors are seen in each individual case; that the primary lesion of the skin, tongue, mouth, pharynx, tonsils, etc., is with the superficial lymphatics and capillary blood vessels; that wherever we find an eruption we find especially the streptococcus. We all know how readily the lymphatics, especially those of the neck, become involved.

Scarlet fever, I think, resembles diphtheria in many of its symptoms, especially in those seen about the throat; we know they are frequently associated. These being facts, then how important close attention to the throat must be, and all of us know how little attention is paid to it. Lemoine, with Le Gendee and Sevestre, think that the contagion of scarlet fever starts from its port of entry, the pharynx; he believes that too much attention is paid to the skin and not enough to the mouth, where the contagious principle may linger for a long time. Enlargement of the lymphatic glands is a most constant sympton. With this comes involvement of the blood, kidneys, heart, lungs, intestines, spleen and peritoneum. Alonzo Clark says: "There is no scarlatina without the existence of inflammation of the pharyxn; an eruption without it is not scarlatina." I take it we are all too well acquainted with the throat lesions, and with those of the tongue, lining of the cheek, etc., for me to mention here; they are about such as are found on the skin, only they are well advanced usually when the skin eruption shows. The pharynx, tongue, tonsils and surrounding region, being usually the first involved, are the first to heal. With our present knowledge of the angina of scarlet fever it must be a streptococcus infection. We all know that diphtheria bacillus is found in a small per cent. of cases, especially in that form known as pseudo-diphtheritic angina. The classification of scarlatinal angina is difficult, as one form so frequently shades into another; still a classification, such as streptococcus, erythematous and membranous form, has been made. The latter form adds to the dangers of infection that of mechanical obstruction; when there is not true diphtheria the membrane is not liable to leave the faucial tonsils. Yet, since we have tonsil tissues in the nose, pharynx, larynx, and on the base of the tongue, why not have the same membrane, *although not diphtheria,* extend to any place in which there is tonsil tissue?

Of course the prognosis is more serious in the second form than in that of the first, and still more so in the third. Selner and Thure found in a great many cases of scarlet fever only 2 per cent. of diphtheria. Lechtenstein found in an epidemic of scarlet fever in a hospital at Cologne that four-fifths of the cases had diphtheria. When we recall the fact mentioned before, that really no tissue of the body escapes this infection, which

in a majority of cases enters through the throat; that we may have suppurative inflammation of the eye, cellulitis extending from the neck to the umbilicus, perichrondritis, pleuritis, nephritis, malignant septicemia, true croup, suppurative inflammation of the ear, with all its dangers, and even a gangrenous angina, and it being a fact that close attention to the throat and nose may prevent much of this, we all can surely see what good may come of it. I believe there is no one present who will assert that such attention to the throat and nose may not be of much service.

I do not think it necessary for me to draw any more serious pictures of scarlet fever, its complications and its pathogeny. Some authors have said that the throat in scarlet fever bears the same relation to the disease that the primary sore does to syphilis. I think even more so, as illustrated by the effect of local treatment. In a throat in which there is absence of the Loeffler-Klebs bacillus, simple washes of listerine alone or mixed with hydrogen dioxide, or even Seiler's fluid or Dobell's solution, or normal salt solution, all are serviceable. They should be applied with a spray or mop, or if the upper pharynx and nose are involved, the post-nasal syringe, with the solution diluted. Of course, with very young children, the spray and medicine dropper must be substituted for the syringe. If the Loeffler-Klebs bacillus is present, then Loeffler's solution must be supplied locally; or, still better, some mild wash for cleanliness and an injection of serum made, to be repeated, if necessary. When the Loeffler-Klebs bacillus is not found, the streptococcus serum of Parke, Davis & Co. is of much benefit.

My experience, and that of others, has been in scarlet fever, that if the throat gets prompt, close attention, the disease is robbed of many of its dangers. In those cases in which the child is rebellious and in resistance of the treatment, much depression follows, as little local treatment as possible must be used. In this, as in diphtheria, the serum injection does away almost entirely with local treatment, and entirely with any *severe* local treatment.—*Louisville Monthly Jour. of Med. and Surg.*

Affections of the Eye and its Appendages in Bright's Disease.*

By William Cheatham, M D.

As affections of the deeper parts of the eye occur more often in that form of nephritis in which the kidney is small or contracted, it is that form to which I wish especially to refer. All forms of nephritis, both acute (scarlatinal and that of pregnancy) and chronic, may affect some parts of the eye; it may be simple edema of the lids or conjunctiva, sub-conjunctival hemorrhages, paralysis of the lid muscles or muscles concerned in movements of the globe, cataract, mydriasis, iritis, cyclitis, or the well-known changes seen in the retina and optic nerve. Paralysis of ocular muscles, depending upon nephritis, is more common than one would suppose from the literature on the subject; the urine should be investigated in all such cases. In acute cases the loss of vision and other symptoms are often cortical. The ophthalmoloscope will show nothing, and the pu-

*Read before the Louisville Medico-Chirurgical Society, February 1, 1901.

pil will respond readily to light. Again, in the acute form, especially such as seen in the uremia of pregnancy, we have marked neuro-retinitis or optic neuritis; they belong to the inflammatory type. These cases come, of course, from an auto-infection; the prognosis is more hopeful, especially if the cause, the uterine contents, can be removed. After this is done, or in any case whether labor is artificially produced or not, pot. iodide internally I find wonderfully effective in connection with diuretics, purging, etc. But it is to the retinitis and optic neuritis of chronic nephritis to which I especially wish to refer in this short paper, and the importance of the use of the ophthalmoscope as a prognosticator as well as a diagnosticator. One may make the diagnosis of chronic Bright's disease, and especially in that form known as the contracted kidney, and and may prognosticate some years of life, yet if the ophthalmoscope can demonstrate changes in the retina and optic nerve typical of chronic nephritis, a short life must be promised, although I have seen several cases last from three to eleven years. A majority, though, of such cases seen by me have died in six months or less.

The amount of lesion seen by the ophthalmoscope does not always indicate the amount of vision present, nor do I believe prognosticate the length of time the patient may live. Such changes occur only in the later stages of the disease, and one or two small hemorrhages may mean as short a life as a case in which the changes are many and typical. I have seen typical changes in optic nerve and retina, involving all the macular region, in which one would suppose there was but little vision present, in which vision was perfect. I remember one of the most typical cases I saw in New York while examining the eyes of school children for Dr. Agnew, whose vision was perfect, and who lived less than a year. Optic nerve and retinal involvement is found in about thirty per cent. of cases of Bright's disease of the kidneys. The retinal vessels are more often involved than those of other parts of the body, because they are terminal vessels; they have but few or no anastomoses.

It has been my lot to see many cases of neuro-retinitis albuminurica. I have seen several in which there were no derivatives in the urine for days or weeks and one case in which urine showed nothing but low specific gravity for six months. The patient lived but a short time after that. A great majority of cases seen by me had never been suspected by the family physician, because they had presented no symptoms. Some came to me complaining of loss of vision, painful eyes, external ocular hemorrhages or edema of lids, and many of them applied to have glasses fitted, and in my routine work the ophthalmoscope revealed the trouble. I spoke a moment ago of typical cases; there are such, I am sure. I have seen cases in which I was just as sure as any one could be of anything that Bright's disease was present, and it was afterward demonstrated. In such typical cases I have never been mistaken; the disease, I believe, is systemic, not local. Some other diseases, such as diabetes, anemia, lead poison, etc., cause somewhat similar changes in the nerve and retina: with them, although, and especi-

ally with diabetes, we are liable to have a concurrent albuminuria. The principal change observed in the retina in albuminuria is white patches in the deeper layers of the retina, sharply defined, alone or in groups, mainly central, less numerous in the periphery, often arranged in a stellate form around the macula. Retinal hemorrhages, flame-shaped, often very small, are usually present, but are not so characteristic.

We have optic neuritis also, occasionally a choked neuro-retinitis. We may have reto-bulbar neuritis, in which vision is usually much affected. With all these changes we have often extensive edema of the retina. The cause of all these symptoms is a hyaline thickening of the blood-vessel walls, a narrowing of their lumen, resulting in total occlulusion and sclerosis. The white patches are fatty degeneration of the retinal layers. The disease is usually bilateral; unilateral cases are not rare ;the disease is usually more advanced in one eye than the other.

Of course, the presence of albumen in the urine does not make your diagnosis, neither does its absence prove that the kidneys are not involved. I have cited one case in this paper, and Edwards, in the *American Journal of Medical Sciences,* October, 1898, reports three cases in which the urine showed no derivatives. This is the case more often in the interstitial variety; the condition of the retina and cardio-vascular system is of much help in making a diagnosis in these cases. The character of the casts found in the urine is also of much consequence. The hyaline, fibinous, and red-blood cell is the result more of transudation; the colloid, fatty, amyloid, and epithelial the result of desquamation; the granular cast, especially if it is persistent, indicates beyond any doubt a nephritis.—*American Practitioner and News.*

Practical Obstacles to Success in the Practice of Medicine.

By M. C Martin, M D., Hildreth, Nebraska.

The physician sees human nature in all its phases and learns some lessons by hard experience.

Theoretically, patients ought to do as directed, practically they follow their own sweet wills, unless they are in sudden danger of death. How many patients have been hurled into eternity by disobedience to the doctor's orders, no man can tell. It is rarely in practice that a physician can be sure that his orders have been obeyed. When a physician has a trained nurse that is faithful, he has an ally that to be appreciated once must be experienced. The so-called nurses who swear allegiance to your face, sleep most of the time on duty, drink up all of the stimulants that are left for the patient, and are a mixture of promises and excuses, are what make the physician's life thorny, the lives short that are entrusted to their care, and of course the doctor gets the cursing.

Sometimes by scaring a patient well I have succeeded in getting orders carried out; but I have come to the conclusion that it is best to decline to treat all disobedient patients. The old Adamic nature generally rules, the appetite is stronger than reason; the body is master instead of servant. The patient thinks he knows more than the doctor, and this little bit won't hurt him, and so the careful work of the physician comes

to naught and the patient loses confidence in the physician, and the nostrum comes in. Nature effects a cure, and it's a great medicine that is triumphant in the newspaper. Every practical physician knows that good, common sense in treatment can't be dispensed with and any success achieved.

We need some educated sanitary cooks in this dyspeptic age, and the people need training on that line. In the hospital or sanitarium is about the only place where we can be sure that our patient is getting treated according to the best therapeutics, a scientific dietary and the most approved hygiene of this latest and best age of the world.

Good medicine is wasted by bad and untimely giving.

The most scientific and careful physician's efforts are rendered abortive by careless execution. Take a chronic case with a record of declining health, and all efforts failing to restore health. Such a case placed in a sanitarium under the supervision of a competent physician, with a trained nurse, to see that all baths are taken, are of the proper temperature, taken at the right time, as often and no oftener than indicated, that the patient has plenty of fresh air, that the prescribed diet is taken at proper times and amounts, that the oil of cheerfulness be taken to assuage the cares of life, that massage be utilized when necessary, and electricity be resorted to for its constitutional tonic action, its local anodyne or antiphlogistic action, and see hope take the place of despair, and see what nature can do when not thwarted by mistaken kindness and misguided efforts. Physiological rest can be obtained better at a sanitarium that at home, a gymnasium to train the muscles, games to divert the mind, and a change of scene, all conspire to beget in the despairing invalid the desire to live longer and do better, and the lessons in hygiene should never be forgotten by the patient while life lasts. The great cry by the invalids of America is what shall I take to cure me of this disease? when the fact is they have taken to much medicine and too little care of themselves. They need, most of them, to take more fresh air, more exercise, more baths, more regulated diet, more time to eat, more care of their teeth, more time to sleep.

Think of the nicotine poisoned, the inebriates, the slaves of coffee and tea, the late hours, the drug habitues, the slaves of fashion, the children who are crowded in school beyond their strength, the overworked mothers and then say whither are we drifting? We want more hygiene and less politics, more common sense in dress and less blind following of fashion. We want more food to nourish the body and less palate ticklers. What we sow we shall surely reap. If we sow to please the flesh, we shall reap a whirlwind of headaches, stomach-aches, dyspepsia, shattered nerves and often insanity and ruin.

Send the poor, dragged-out farmer's wife to the sanitarium where she can have time to look in the glass, comb her hair, where she can get rested, where she can have a trained nurse that knows whether the enema went into the colon or into the bed.

The people's ideas are rather constipated on medical subjects as well as their bowels.

The mad rush for the almighty dollar leaves them no time nor disposition to care for the body which is the temple of the living God. Whosoever defiles the temple, him shall God destroy.

The people need more hygiene and less medicine, more sunshine, more baths, mor recreation, more graham and less pills, more water and less coffee and tea; more warm, comfortable clothing, and less style, and they will not lay so many deaths to a mysterious providence.—*Wisconsin Medical Recorder.*

Carbolic Acid: Its Use and Abuse.

By George W. Sargent, M. D., Seneca Castle, N. Y.

Phenol, phenyl hydrate, phenic or carbolic acid is one of our most interesting and useful remedies. There is none more capable of harm, or more commonly used accidently, and with evil or suicidal intent. It is employed largely and carelessly by the laity, and held in somewhat superstitious regard by many, a few drops of the acid allaying all fears of infection. Every few days we hear of some accident or fatal result from it. It was formerly used as a remedy internally, and by injection. It is now employed for the purpose of a preservative in preparations of antitoxin. Considering the large doses of antitoxin now given, an unsafe amount of the acid is liable to be injected with a very deleterious influence on the heart and kidneys.

In the *Medical Record* of March 11, 1899, Dr. Seneca D. Powell, of New York, asserts that alcohol is a perfect antidote to carbolic acid; moreover, that in connection with alcohol the acid is capable of greater service than is generally supposed. Powell has demonstrated that the pure, or 95 per cent. acid, may be rubbed on the skin or held in the mouth with impunity until the skin or mucous membrane turns white if the parts are then rinsed with 95 per cent. alcohol. I am able to testify to the truth of this from experience, having unintentionally performed the experiment, already alluded to, on my own hands. I had on a table before me two two-ounce bottles labeled and filled respectively with carbolic acid and alcohol. Wishing to rinse my hands with alcohol, I picked up one of the bottles, poured a liberal quantity into one palm and rubbed it over both hands as in the act of washing. I was not surprised a little to find by the greasy sensation and silvery color to which my hands were turning that I had used the carbolic acid. However, a thorough rinsing in alcohol from the other bottle, to my satisfaction, promptly restored the normal color and feeling, with the exception of a slight sensation of dryness and roughness for the rest of the day.

Since Powell's paper, this antagonism between carbolic acid and alcohol has been made considerable use of in minor surgery and in treating carbolic acid poisoning. In many instances the pathogenic germ which the physician or surgeon has to deal with is beyond control with the agents at hand in the strengths ordinarily or safely used, but carbolic acid may be employed with alcohol in full strength; and by its means a suppurative or an ulcerative process can be checked and one of healthy granulation produced quickly with rapid healing.

According to the *Therapeutic Gazette* the pure acid is relatively less toxic to the normal tissues than the diluted acid, its penetrability is slight during a brief application, and its bactericidal action surpasses that of corrosive sublimate, from the fact that the action of carbolic acid is not materially affected by the presence of acids, alkalies, salts or albumen, yet in some cases may thereby be considerably increased. (Anthrax spores are destroyed by a 2 per cent. solution of carbolic acid alone in 30 days, but by a 2 per cent, carbolic with 1 per cent. hydrochloride acid, in seven days. Staphylococcus pyogenes aureus by 1 per cent. alone in five minutes, but by 1 per cent. carbolic with 20 per cent. common salt in one minute.)

Carbolic acid is serviceable in mammary, tubercular and other abscesses. Here the cavity is first evacuated, then cleansed by irrigation, swabbing or curetting, and swabbed out with pure carbolic acid, then with alcohol, and finally again irrigated. In this way a normal granulating service may be secured in a surprisingly short time. A. M. Phelps, of New York, uses the pure acid in this way in tuberculous joints. Empyema, cystitis, hydrocele, and the like, are amenable to carbolic acid, using a solution of ½ drachm to 1 drachm to the ounce of water followed with 25 or 35 per cent. alcohol.

In the case of hydrocele a quantity of the pure acid is injected and allowed to remain without further interference. Erysipelas is successfully treated by painting the affected surface with 95 per cent. acid, and when the skin turns white, with alcohol. One of our members has told me of treating a case thus, but found it very painful, though effective. Others who have reported cases make no mention of pain. A brief application of the acid to the normal skin or to an ulcer or other raw surface is not painful.

Ivy poison is rapidly cured by a 2 per cent. lotion, and the lymphangitis that is apt to occur in connection with infected wounds is usually readily controlled by it; also the redness, pain, induration, and other signs of inflammation in caked breast or mastitis. In cellulitis of the hand or foot, Powell injects the pure acid and then alcohol, cocaine being first used to avert the pain of the needle. The pure acid is used in mastoid abscesses, in septic conditions of the endometrium, ischio-rectal abscesses, furuncles, and other conditions. Some persons dread an operation and will submit to any treatment, though much slower, rather than undergo cutting. With a specially constructed syringe that will follow the sinuous tracts of fistula-in-ano it is possible to accomplish a cure without a knife.

The danger of poisoning should always be borne in mind. The long continued application of phenol might be accompanied with absorption and poisoning through the skin. I may mention the case of an infant seven days old dying from a few drops on the fingers of the nurse. The proper use of the acid does not contemplate usually protracted or continuous applications. Ignorant persons sometimes wrap the fingers or toes in the acid in full strength, or in very strong mixtures, with subsequent gangrene. There seems to be an opinion that gangrene is apt to occur when the

acid is used on the extremities even in weak solution, but I think this must be a very rare result. An instance reported where two brothers, both young men, never ill previously, had gangrene of the fingers following the use of a solution containing only 1.7 per cent. carbolic acid was regarded as due to idiosyncrasy. There is no danger so far as I know from the pure acid followed with alcohol.

The treatment of poisoning cases has been very unsatisfactory. Woodman and Tidy cite twenty-one instances during a period of five years with only one recovery. The doses taken were usually one to two ounces. The smallest fatal dose I have found recorded is ½ ounce. The effect of a poisonous dose is sometimes extremeyl rapid, but generally several hours elapse before death. The antidotes printed on the manufacturers' labels and in the books have not proven efficient. The alkalies in excess have some power, oils retard the absorption of the acid and heart stimulants, as atropine, strychnine and caffeine are useful.

In one instance 2½ grains of caffeine dissolved in water with the aid of sodium salicylate given hypodermatically and repeated in an hour restored a man from a state of coma.

Vinegar is claimed to be efficacious.

Bleeding, one pound of blood being drawn, was once successful.

Emetics are of no service, because the stomach is benumbed or paralysed by the acid.

During the past two years, since the antagonism between phenor and alcohol has been made prominent, several cases of recovery where the patients were apparently moribund have been reported after the exhibition of alcohol. In one case the stomach was washed out with pure alcohol. A 25 per cent. solution will counteract the acid on the skin and it is probable that whiskey or any strong alcohol would answer for internal use.

How this antidotal property of alcohol is exerted is not certainly known. There may be a true antagonism between the two substances, or alcohol may act simply as a solvent, though its action seems to go farther than that. However that may be, we have the fact that alcohol will prevent and remove the caustic and poisonous effects of the acid. The primary step in poisoning cases is to wash the stomach out with alcohol, then whiskey may be given hypodermatically, with the idea of neutralizing the acid in the blood. Other heart stimulants may be required. As the acid is quite rapidly taken up into the blood it has been suggested that no method if treatment is complete without bleeding. But this has not been done to any great extent, or been necessary, to my knowledge.—*Buffalo Medical Journal.*

Septicemia.

The following case was reported by Dr. Chas. A. Page (*Can. Practitioner*):

The patient, a girl of eighteen years, was brought into the hospital suffering from this condition, which had followed an incision made to relieve an imperforate hymen. She had suffered pains every month lasting for three or four days, although there was no show of blood externally. Her mother noticed that she was swelling, and as this kept increasing she took her to her family physician

who found the uterus lifted up out of the pelvis, and on pressing it a bulging was caused of the imperforate hymen. This he incised and turned out a large quantity of clotted blood, introducing packing of iodoform gauze. He replaced the packing every day, and flushed out the vagina. Unfortunately at the same time he was attending a case of puerperal septicemia, which afterwards proved fatal. On the third day after operation, she had a severe chill and her temperature went up to 102 degrees F. When she was admitted into the hospital two weeks after this, her temperature was 104.2, respiration 26, and pulse 110. She was ordered purgatives, rectal injections of normal salt solutions every four hours, and whiskey by the mouth. Bichloride douches were also prescribed, which were later changed to carbolic acid douches 1-60, but at no time was there much discharge and the odor was never offensive. Pain, too, was but seldom complained of. Constipation was very marked at first and exceedingly difficult to overcome, and there was continual nausea with occasional vomiting.

On the next day a curettement was done, the vagina being thoroughly flushed out, and the interior of the uterus swabbed with pure carbolic acid and packed. The mucous membrane of the vagina was an immensely hypertrophied condition, the folds being many times increased in size, each presenting a dirty, sloughy appearance, from which tags of gangrenous mucous membrane hung.

Three hours after the operation the temperature was 104 degrees F. and pulse 102. During the night stimulants were freely administered and the rectal salines persisted in, although not very well retained. The patient had marked chilly feelings, which did not, however, amount to a distinct rigor. Next day the temperature was still up (104 1-5), but there was no suffering and she stated that she felt "all right." A subcutaneous saline, one and one-half pints in amount, was given under the right breast, her temperature dropping two degrees after it, only to jump up to 105 at the close of the afternoon. There was no real chill. Quinine and strychnine were now given for their tonic and stimulating effect.

On the night of the 2d of November her temperature was up to 105 2-5, and she became quite delirious. Her condition at this time was very grave, her pulse running 110, of low tension and poor quality, although regular, with the temperature keeping between 104 and 105 2-5 degrees. She presented, too, a typical septic appearance. The complexion had become pale and sallow, and the subcutaneous adipose tissues were rapidly lost. The pupils became dilated, though they were of equal size and reacted sluggishly together. The breath was characterterized by that indescribable sweetish odor, which is so often present in these cases. Later she passed into a typhoid state, with a dry brown tongue, irritable and delirious, and the urine and feces being passed involuntarily.

On the 3d of November a second saline was given, this time under the left breast, amounting to two pints, but there was no reaction, the temperature running up four points. She also became exceedingly irritable and restless, refusing all nourishment

and stimulant and whining if anything were done for her. The bowels were kept freely open, and elimination carried on as consistently as possible, very free stimulation being given, for the pulse was running between 130 and 138, of very low tension, with respirations 44.

An examination of the urine showed a trace of albumen, with the ordinary febrile characteristics. A bacteriological examination of the blood gave a pure culture of the staphylococcus pyogenes albus, the virulence of which, however, was not tested, but the plate colonies died out in three days.

On the 6th of November an antistreptococcic serum injection was given, with negative results. That afternoon, however, four pints of intravenous saline was given, with most marked results. The median-basilic vein was laid bare by a transverse incision, and no little difficulty was experienced in finding it, for a good deal of adipose tissue still remained. Half an hour later there was a most violent chill, the temperature becoming 105 4-5 (per axilla), pulse 152, and respiration 58. That night she got another injection of antistreptococcic serum. Towards morning the temperature began to drop, and at 10 o'clock had reached 95 2-5 (per axilla). The vaginal discharge had increased, and the patient was much brighter, less irritable, and seemed altogether a great deal better. The heart sounds continued normal, but she developed a slight bronchitis.

On the 9th another subcutaneous saline was given, preceeded by a serum injection, but no reaction occurred. Nutrient enemata had to be resorted to at this time for the patient could not be made to take sufficient nourishment.

On the 10th another saline was given under the left breast, with no noticeable reaction. On the 11th the pulse was running 132 and of poor quality. A second intravenous saline of four pints was given, this time in the vein of the right arm, with no appreciable effect.

The morning of the 12th found the right arm painful, and on an examination it was discovered that the incision for the first saline had broken down, leaving a septic-looking wound, with blood suffused in the subcutaneous tissues round about and discharging a virulent reddish serum.

The incisions in the breast also did not heal, and a dirty discharge, most septic in character, was present in sometime quite large amounts. The pulse was now very weak and irregular, the tongue brown and dry, and as she lingered on the temperature slowly dropped while the respiration and pulse rate gradually increased until her death on the 16th.

The most interesting points in the ease are the unusual indication for operation, the presence of the staphylococcus albus and the characteristic breaking down of the incisions made for the salines, showing the absolute lack of the physiological healing process. In spite, too, of the presence of bacteria in the blood, as proved by culture, no pyemic chills occurred and no endocarditis could be made out.

Quite an elaborate X-Ray apparatus has been installed by the Private Hospital, Charlotte. It is a duplicate of the machine used at Johns Hopkins.

Review of Medical and Surgical Progress.

The Prevention of Ophthalmia Neonatorum.

In an article on the prevention of ophthalmia neonatorum, Dr. Lucien Howe, of Buffalo, (*Philadelphia Medical Journal,* January 18, 1902,) whose name is so prominently identified with this subject, urges the enactment of laws which will make it compulsory upon the practitioner to adopt some form of prophylaxis against this disease, which is responsible for so many cases of blindness. He cites statistics by Kostling, showing that in 17,000 births where no prophylactic treatment had been employed some trace of ophthalmia developed in over nine per cent., whereas in 24,000 children treated by the Crede method the number who developed the disease was only one-half of one per cent. The Crede method, however, has the disadvantage of always producing some pain and usually more or less conjunctivitis, while in a few instances it has given rise to corneal ulceration. According to the statistocs of Piotrowski, in 1,030 children treated with a 1 strong solution of boric acid a ten per cent. solution of protargol not a single case of ophthalmia occurred, while slight catarrhal conjunctivitis was observed in only 1.2 per cent. Aside from the numerous favorable reports on the value of protargol as a prophylactic against this affection by European authors, the drug is preferred for this purpose by many ophthalmologists in this country, including Drs. Alt, Peck, Cheney, Fox, Hotz, Zimmermann, Converse and Todd. In commenting upon Dr. Howe's paper, the *Philadelphia Medical Journal* remarks editorially: "If we cannot reach the fons origo of ophthalmia neonatorum, we can at least save the offspring from a life of darkness, and protect the community from a source of burden and expense. That this can, to an enormous extent, be accomplished by prophylactic instillation need hardly be repeated, and its negligence constitutes a sin of omission that deserves commensurate punishment. The enactment of such a law is feasible, its interpretation obvious, and its enforcement not difficult, provided the accoucheur receives the intelligent support of an intelligently instructed community."

Foreign Bodies in the Œsophagus.

Dr. J. W. Long, of Salisbury, N. C., in a paper read before the Southern Surgical and Gynalogical Society in Richmond, in November, 1900, stated that this accident occurred usually in children and lunatics. It was always possible when a patient was under an anæsthetic, and even food might become impacted in the

œsophagus. The appearance of stricture, pouch, or malformation increased the liability to this accident. A foreign body in the œsophagus carried with it both immediate and remote dangers. If lodged high up, there would be dysphagia, retching, and sometimes suffocation, as in a case seen by the writer two years before, in which an inch screw entered point downward the upper end of the œsophagus of a three-months-old infant and impinged upon the trachea. When the foreign body was lodged lower down, the danger was more remote and less easily remedied. Unless removed, foreign bodies almost invariably penetrated or ulcerated into some important stricture, such as the pericardium, the aorta, the mediastinum, or the pleura. The longer the object remained *in situ* the greater the danger incident to its removal.

After calling attention to the special anatomy of the œsophagus, the author mentioned the different methods of removing foreign bodies from it. He condemned ematics, except in cases where the nature of the object made it not apt to do violence to the œsophagus. Many objects were removed by manipulation through the mouth or pushed into the stomach. Unduly prolonged or rough manipulations through the mouth were dangerous, even more so than œsophagotomy.

The author reported two cases in which a penny whistle was lodged low in the œsophagus, opposite the fourth dorsal vertibra, in children four and seven years old respectively. In both instances the foreign body was removed by external manipulation, although it was well down within the intrathoracic portion of the œsophagus. Removal of the foreign body was done under chloroform. He also reported one case of an open safety-pin lodged low in the œsophagus of an infant forty-six days old. The pin had been *in situ* eighteen days, but by means of œsophagotmy it was easily removed. In this case the baby was put immediately to the breast. All the patients recovered. In the three instances metallic substances were discovered by means of the x-ray.—*N. Y. Med. Journal.*

Latest Views on Strychnine.

Jacobi believes that the modern maxim, "simplicity of prescription, only one drug at a time, no polypharmacy, rely on Nature," has its scientific and ridiculous side (*International Clinics,* January, 1902), and urges the necessity of combining medicines in combined conditions, as muscle, serous membrane, vagus and sympathetic may be affected coincidently, or some of them at the same time.

Strychnine is eminently a vasomotor remedy (*International Clinics,* January, 1902), which is indicated to correct digestive distribution of the blood. It stimulates the centre of the pneumo-gastric nerve and thereby contracts all the blood vessels under its control, mainly those of the heart and of the abdominal cavity. These latter depend on the action of splanchnic nerve, section or paralysis of which results in dilatation of the numberless and dilatable vessels of all the viscera. The vast amount of blood thus stored in the abdominal cavity is withdrawn from the aorta, the pressure of which is lowered (even much more than in excessive aortic insufficiency) and from the brain. Pallor,

collapse and syncope are the result. Strychnine, through its stimulating influence on the centre of the vagus, contracts the paralytic blood vessels, and thus facilitates a new supply to the heart and brain.

The dose of a remedy required is by no means a stable one, for the amount of blood appears to influence the action of a drug in the living organism. Young infants, ill fed, emaciated, slowly convalescent, or septic patients, or those in whom the nerves —for instance, in infectious fevers— have undergone organic deterioation, require larger doses apparently of strychnine (also of other poisons, such as quinine, atropine and nicotine) than the normal organism. The new born infant is but little sensitive to strychnine. The spastic effect is obtained by 0.415 of a milligramme of the nitrate. In older children unexpected effects of strychnine have been observed; serious accidents have been recorded following its subcutaneous use in diphtheritic paralysis.—*Medical Times.*

An Estimate of Alcohol.

Dr. G. Sims Woodhead (*Edinburg Medical Journal,* August,) closes "Some Notes on Alcohol in its Medical and Scientific Aspect," presented as an introductory paper to a discussion at a meeting of the Edinburgh Medico-chirurgical Society, with the following words:

"May I be allowed to sum up my own opinion of alcohol in a few words. It is a narcotic poison, of which the pernicious effects are to be seen at all times and on every hand. It is a drug which, under certain conditions, *may* be valuable, but it is a dangerous medicament in the hands of any one but a physician; and even in the hands of the physician or surgeon, its exhibition is attended with dangers that attach to the prescription of no other substance in the pharmacopœia; these dangers are not moral only, but physical dangers, resulting from the action of alcohol on the tissues generally, but especially on those of the nerve centres. Its food *value* under ordinary conditions is practically nil, and, put in the most advantageous light, can only be temporary, and then of an extraordinarily slight and, I believe, wasteful character."

The Over-supply of Ministers and Physicians.

The medical man is apt in these days to bewail his hard lot in having to contend with competition both from without and within, and to declare it becomes daily more difficult to make a decent living at the practice of his profession. The path of the ordinary practitioner is, indeed, not strewn with roses; but, as was pointed out in the *Medical Record* about a years ago, the minister had, in many respects, a rougher road to travel than his medical brother.

The relative earnings of the two professions were shown to exhibit a decided advantage in favor of the doctor.

Neither of these callings, however, is perhaps paid in proportion to the merits of its followers, or to the expenditure of money and brains requisite to become qualified.

The cost of gaining an entrance to the medical profession is, on the whole, considerably greater than of

being admitted to the ministry, and, therefore, it would seem but fitting that the doctor's opportunities of making money should be wider than those of the preacher.

In both instances the reasons for the meager returns are the same, over-supply and consequent bitter competition.

"A Pastor," writing recently to the Chicago *Interior*, decries in strong terms the tendency of the age to aid young men to enter the church, and goes on to say that the apparently inexhaustable supply of young ministers has operated to create a general spirit of restlessness among our churches, so that there is not another business, not another profession, not another enterprise of an honorable character, in which a competent and faithful man holds his position with so much uncertainty as does a pastor.

"We should," remarks the writer, "be willing candidly to acknowledge that we have trained a larger number of ministers than can be respectably supported, and we should cut off the aid now so indiscriminately offered to young men, excepting those who may be willing to go to the foreign field."

If Pastor's facts are true, we agree with him that it is by no means in the best interest of religion that the cost of the training for the Church of an altogether superfluous number of young men should be defrayed by charity. The remedy for over-supply in both the medical and clerical profession would be to make the test of education much more severe than it is at present.—*Medical Record.*

Sickness in the Philippines.

The report of the Philippine Commission, recently made public, deals largely with matters relating to public health. Consumption is said to be the greatest cause of mortality among the natives in Manila, and the Commission says that "measures are now being taken to ascertain the exact whereabouts of all persons in Manila suffering with this disease, with a view to the possible establishment of a consumption colony outside the city limits for those cases where danger of infecting others is greatest." While the number of lepers in the Philippines has been estimated as high as thirty thousand, the Commission is rather inclined to the belief that there are actually less than a third of this number of cases of leprosy. "A leper census of the islands is being taken, with a view to the eventual segregation of all persons suffering with this disease on the isolated but fertile and healthful island of Cagayan, where they can be given better care, allowed greater liberty, and made more content, than when confined in hospitals." The constant presence of bubonic plague in Manila and the adjacent towns, together with the prevalence of smallpox among the natives in a number of provinces, causes the Commission to say that the board having charge of the health interests of the islands has plenty of work to do. For its assistance in the study and diagnosis of disease, the Commission recommends the establishment by the government of a number of laboratories. The Commission combats the statement

made generally by the press that a large number of soldiers serving in the islands have been made insane by climatic conditions, and says that "the truth is that the large majority of cases of insanity among the soldiers have been produced by drinking so-called 'vino,' which has been shown by chamical analysis to contain in some instances as high as 17 per cent. of fusil oil, and is therefore a deadly poison." Rinderpest is stated to prevail extensively among the cattle of the island.—*Medical Record.*

Practical Ideas on the Treatment of Pneumonia, Pericarditis and Tubercular Pleurisy.

By Edmond J. Melville, M. D., C. M., Bakersfield, Vt.

About a year and a half ago my attention was called to a new form of applying moist heat by means of a preparation called Antiphlogistine. I had discarded the poultice years before, not, however, without being aware of its therapeutical value in certain affections. Though skeptical, I was desirous of finding something possessing the virtues of the poultice, minus its vices, and made a trial of Antiphlogistine in a series of cases, with favorable results. After an experience of eighteen months with the product I have come to the following conclusions:

1. When a coating is applied over an inflamed area, or the skin covering an inflammation in an internal organ, an afflux of blood takes place, thereby diminishing the pressure and arterial tension in the internal organ. 2. The tissues are relaxed and the removal of the pressure from the sensory nerve filaments relieves pain at the periphery and very often the impression is conveyed to internal organs far removed and having no anatomical connection with the part where the Antiphlogistine is applied. 3. Again, I have found that in tense, indurated swellings, one, or repeated warm applications of Antiphlogistine will soften the tissues and relieve the stasis, consequently tension of the inflamed part is lessened and resolution favored or the inflammation aborted. Even in cases where the stage of suppuration has been reached, as in suppurating boils and felons, I have seen the migration and multiplication of white blood corpuscles promoted and extrusion of the purulent contents hastened.

Case 1. Fibrinous Pleurisy; Miss C— N—, aged 46; feeble health always. Family history of rheumatism and tuberculosis. Called January 8, 1900. Patient suffering from severe chill, lancinating pain in region of right nipple, extending over a surface as large as the hand. Dry cough, scant expectoration streaked with blood, dry rales, temp. following chill, 103 deg. F., pulse 120, resp. 50. Patient propped up in a chair to relieve tension on pleura. Bronchial breathing; friction rub present; no exudate discernible. Diagnosis, acute fibrinous pleurisy. Gave epsom salts ½ gm. to insure free purgation. Applied warm Antiphlogistine over the entire thoracic walls, front and back. At 10 p. m., I found that the patient had had a copious evacuation. Removed Antiphlogistine and applied a fresh coat. Pain and dyspnoea were greatly relieved, temp. 101, pulse 95, and patient was able to assume the recumbent position. January 9th (9

a. m.,) patient was free from pain, temp. 99, pulse 84, resp. 22. She was very comfortable. No untoward pleural symptoms. Applied Antiphlogistine daily for three days, when recovery had so far progressed that further attendance was deemed unnecessary.

Case 2. Pneumonia and Pericarditis; H. D., aged 60; hotel keeper, heavy eater and drinker. Contracted a well-defined attack of unilateral pneumonia of left lower lobe, May 5, 1900, severe chill, lasted over an hour. Tem. 105, pulse 104, resp. 38; tongue coated, foul-smelling breath, consolidation over posterior portion of left lower lobe. May 7, the cough and rusty sputum; other symptoms, practically unchanged. Ordered rest, liquid diet, and in short gave usual treatment for pneumonia. May 8th, 5 a. m., patient had another severe chill and pericarditis with effusion supervened with severe pain in left axiliary region. Temp. 105, pulse 140, weak and intermittent. Dislocation of heart beat to right of sternum. Dyspnoea out of all proportion to extent of effusion. Patient delirious and tossing about in great mental and physical distress. Enveloped area, well over and around site of pain and effusion, with coating an inch thick of warm Antiphlogistine. Placed patient on as dry diet as possible, and gave a capsule containing strych. 1-20, glonoin 1-50, pilocarpine 1-10 every three hours. Changed Antiphlogistine every eight hours for the first 48 hours, then every 24 hours for three days following. Watched symptoms closely, and under this line of treatment patient showed immediate and continuous improvement. May 10th the symptoms had become so favorable that I considered the danger over. Pain was pretty well under control before second application began to dry. Pulse beats became slower, less intermittent and increased in volume. Temp. dropped three degrees in as many days, and the effusion began to disappear. Lastly, and most marked of all, the dyspnoea was relieved. The epsom salts produced copious liquid discharges, the glonoin and pilocarpine produced free diureses and diaphoresis, and thus aided materially in absorbing the liquid from the lymph spaces in the pericardium. May 12th, 11 a. m., patient sat up in bed. Temperature, pulse and respiration were normal. Lungs and heart acting well. In three weeks patient was practically as well as ever.

Case 3. Tubercular Pleurisy; Mr. R— S—, aged 65. Contracted tuberculosis in spring of 1900. Saw him in June, 1900, when he was suffering with an agonizing pain in right axillary region from an aggravating pleurisy of six weeks' duration. Opiates had been given without avail, and blistering, cupping and strapping only gave temporary relief. Excessive doses of morphine only partially relieved pain. Applied coat of warm Antiphlogistine to affected part, and next day found patient had rested well, notwithstanding the fact no opiate had been given. Each application was peeled off at the end of 24 hours and a fresh coat applied.

The disease steadily progressed, however, and the patient succumbed in October to general tuberculosis. I report this case merely to show that Antiphlogistine's remedial value is of much consequence, even in hopeless cases, where the patient's dying hours

may be soothed without blunting their reasoning faculties.

While I should not wish to say, as yet, that Antophlogistine used early and often will abort pneumonia, pleuritis and pericarditis, I can safely say that it is the most valuable agent I have yet used to shorten the disease. —*Medical Sentinal.*

Glycosuria and Insanity.

At the recent meeting of the Royal Academy of Medicine, Ireland, Dr. Dawson (*Medical Press,* December 25, 1901,) read a paper under this title. He said that cases of glycosuria associated with insanity are of two classes—those in which the insanity is secondary, and those in which the glycosuria is secondary, the first being rare. He has had one case of the first class at Farnham House, that of a woman who had suffered for many years from polyuria and recurrent melancholia, with general debility, the melancholia being of the type described as characteristic of diabetic insanity. She had been admitted for a severe attack, and sugar being present in the urine, she was put on a diabetic diet. The sugar and the mental symptoms disappeared, and she was discharged recovered in about two months. The diet has since been persisted in, and she has remained unusually well for about a year.

Two other cases were then briefly described which probably belonged to the second class. In one, depression dated from an attack of influenza; in the other the melancholia was a second attack, the first following an injury to the head. Both had glycosuria, for which they were treated, and recovered, so far as the acute attack was concerned. In four more cases, glycosuria had been present on a few occasions only, and had not been treated, the forms of mental diseases being respectively paranoia with depressing delusions, subacute mania with a tendency to stupor, acute mania with stupor and unpleasant delusions, and acute confusion.—*Medical Age.*

Grandma and the Baby.

Oh, these doctors and these nurses that they have around to-day!
I'd send them all to Bungy if I only had my way.
"You musn't toss the bady!" and you've got to let it cry,
If it happens to get hungry 'fore three hours have went by.
They make a lot of rules, and if you break one there's a row,
And grandma's little precious, how they do abooze it now!
You musn't walk the floor! Oh, my! That's just a dreadful thing!
And when you put the child to sleep you musn't rock nor sing!
They want to raise a baby just like you add or multiply,
By stickin' to their pesky rules—there now, just hear it cry!
They chase me from the room—they say I'm spoilin' it, the fools—
I'm goin' to rock it, though, in spite of all their rules!

This doctor's just a boy, that's all—he can't raise whiskers yet!
He isn't more than thirty-five, or thirty-six, I bet!
And look at that young nurse! My sakes! what right has such as she
To come around here layin' down her foolish rules to me?
She's never had a baby, yet she tells me what to do—
Why, I had seven children, and we raised the seven, too!

I think it's downright cruel the way people act to-day;
They don't deserve their babies, that's just all I've got to say.
You musn't walk the floor, you musn't rock, you musn't sing,
You musn't feed 'em when they cry, you musn't anything!
But let 'em make their foolish rules; we'll break 'em, won't we, dear?
Great mercy! There's the nurse got back! She musn't find me here!

—*Chicago Medical Times.*

The Nathan Lewis Hatfield Prize for Original Research in Medicine.

The College of Physicians of Philadelphia announces through its committee that the sum of five hundred dollars will be awarded to the author of the best essay in competition for the above prize.

Subject: "The Relation Between Chronic Suppurative Processes and Forms of Anaemia."

Essays must be submitted on or before March 1st, 1903.

Each essay must be typewritten, designated by a motto or device, and accompanied by a sealed envelope bearing the same motto or device, and containing the name and address of the author. No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays if reclaimed by their respective writers or their agents within one year.

The committee reserves the right not to make an award if no essay submitted is considered worthy of the prize.

The treatment of the subject must be in accordance with the conditions of the trust, embody original observations or researches or original deductions.

The competition shall be open to members of the medical profession and men of science in the United States.

The original of the successful essay shall become the property of the College of Physicians.

The trustees shall have full control of the publication of the memorial essay. It shall be published in the transactions of the College, and also when expedient as a separate issue.

Address J. C. Wilson, M. D., chairman, College of Physicians, 219 S. Thirtieth street, Philadelphia.

A Method for Winter Bathing, in Age or Delicate Health.

Of course, the bath-room should be one of the warmest rooms in the house. But if not warm enough, a few inches of hot water in the tub, left standing for half an hour, may meet the deficiency. The same few inches of water, when reduced to comfortable warmth, for the feet to stand in, will make all the difference to be desired in the enjoyment—not dread—of a cold shower bath, etc. If the shower bath be too severe, or not at hand, let there be a foot tub afloat, filled with water tempered to taste, for dashing over the back and chest with the hands or a dipper. The colder one can bear it, the warmer one will feel after it, while plying the long-handled scrubbing brush, which should be considered a necessity for every bath. It may as well be stiff and severe, for it is not necessary to apply it with too painful vigor, and the skin will learn by degrees, to like more and more of it. Finally, the crash or heavy linen towelling, of ample size, which has been wrung out and dried rough, will complete the friction and stimulation of that great vital organ, the skin, which is so necessary to vigorous health.

Itching of the skin is sometimes more than temporarily relieved by applying the brush *in cold water*.—*Modern Medical Science.*

SURGICAL SUGGESTIONS FROM THE MEDICAL RECORD.

Danger Signs in chroloform narcosis are sudden lividity or pallor, dilation of the pupils, shallow respiration, rapid and irregular pulse, or total absence of radial beat.

Acute Synovitis is one of the commonest affections of the knee and generally occurs after sprains; it is sometimes a result of simple exposure. It may also be associated with rheumatism, although the true rheumatic inflammation of joints affects the fibrous capsule rather than the synovial membrane.

Synovitis of Shoulder.—Acute and chronic synovitis with effusion are comparatively rare in the shoulders, and the condition may be readily overlooked if the distention of capsule be only slight; when it is considerable, the swelling is most marked beneath the interior ridge of the deltoid, and the upper arm is slightly abducated and somewhat internally rotated.—*Kansas City Index,* October, 1901.

Gonorrheal Arthritis is commonest in the knee; the ankle and hip are also frequently attacked, while almost any joint in the body may be attacked. It does not occur at any fixed period in the disease, but it is most usually met with between the third and sixth weeks.

Empyaema.—Chloroform is the anæsthetic of preference. Deep narcosis in contraindicated, owing to the danger of pus being drawn into the other lung from a ruptured bronchus. In adults resect two inches of the seventh and eighth or eighth and ninth ribs in the posterior auxiliary line. In children, the seventh, as soon as the diagnosis is made. Simple incision is rarely advisable.—*J. A. Hartwell.*

Urethral Calculus is best removed by cutting directly down upon it, especially in boys.

Medullay Cocainiation has resulted in two more deaths in Paris, and Broca says the method is not safe in the hands of every one.—*Therapeutic Gazette,* October 15.

Wounds of Joints, unless they can be kept aseptic, are among the most serious injuries we are called on to treat; suppuration in a healthy joint not only leads to complete disorganization of the articulation itself, but also involves a very considerable risk of septicæmia and pyæmia.—*Cheyne and Burghard.*

Traumatic Dislocation of the Knee-Joint is a very rare occurrence, as may easily be understood from a consideration of the size of the joint and the strength of the ligaments concerned. Very severe violence is required to produce dislocation, and hence these injuries are usually complex ones, being either compound or complicated, with fracture of the bones in the immediate neighborhood.—*Cheyne and Burghard.*

Volunteer Surgical Assistants.—If you can possibly help it, never allow

relatives or other outsiders to be present at an operation. They are in the way, are apt to touch instruments and dressings, and occasionally vary the monotony of the proceedings by fainting at most inconvenient times. If you are compelled to employ their assistance, you will commonly find that the women of the family make better assistants than men.—*Lilienthal.*

In Traumatic Lumbago massage and prolonged baths are strongly indicated. Ordinary baths are just about as useful as alkaline or sulphurous baths; but the latter may have a psychic influence. When there is much effusion of blood, it is best to avoid the use of wet cupping or leeches. Compresses soaked in the following solution are often beneficial:

℞ Chloride of ammonium..20 gm.
Tinture of arnica.....10 gm.
Water..... 800 gm.

—*Plicque.*

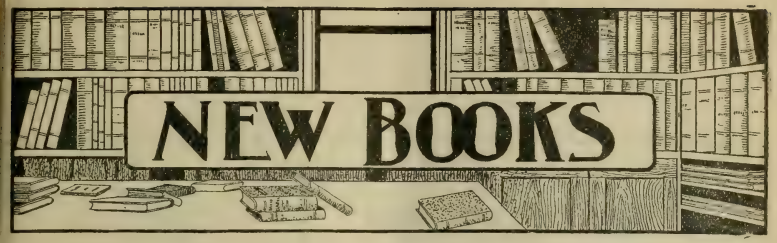
Perineal Prostatectomy.—A median perineal cystotomy is done, and the finger introduced into the bladder to examine the prostate from its vesical aspect. An incision is next made, commencing at the posterior angle of the cystotomy incision, carried straight back along the median perineal raphe, around the anus, to terminate in front of the coccyx. The left forefinger is then introduced into the bladder, and presses the prostate into the perineal wound. The capsule is incised, and the prostate either shelled out from its capsule or removed piecemeal by cutting forceps and scissors, the method of enucleation depending upon the fibrous or adenomatous condition of the gland. A full-sized drainage tube is then passed through the cystotomy wound and secured in position.—*P. J. Freyer.*

Treatment of Accidents Under Chloroform.—It would appear that sudden failure of the circulation, accompanied by pallor of the face and accelerated or gasping respiration, denotes vaso-motor paralysis, and requires inversion of the patient with pressure on the abdomen. On the other hand, if the dangerous symptoms are preceded by struggling, and the face is diffused, with signs or venous engorgement, the patient should be alternately raised to nearly the veritcal position, in order to empty the heart, and then returned to the horiontal position. Artificial respiration should be systematically persevered in in each case. If there is actual failure of the circulation, little that is useful can be done by efforts to raise the blood pressure by such means as transfusion, etc.

In failure of respiration or circulation, hypodermic injections of strychnine and the extract of suprarenal capsule with inhalation of ether are probably the most useful measures.—*The Medical Press and Circular.*

An Old Embalming Method.

The late Dr. Thomas Holmes, of Brooklyn, embalmed the body of President Lincoln, which was found to be in a most excellent state of preservation when viewed recently. His process was a radical departure from the ordinary mode of embalming by means of fluids. Dr. Holmes placed the body in a glass case and subjected it to pressure of a peculiar gas, the action of which hardened the flesh to a degree approaching the toughness of leather. That is all that is known of the process to-day.



THE MEDICAL NEWS POCKET FORMULARY, New (4th) Edition. Containing 1,700 prescriptions representing the latest and most approved methods of administering remedial agents. By E. Quin Thornton, M. D., demonstrator of therapeutics, pharmacy and materia medica in the Jefferson Medical College, Philadelphia. New (4th) edition, carefully revised to date of issue. In one wallet-shaped volume, strongly bound in leather, with pocket and pencil. Price $1.50, net. Lea Brothers & Co., Philadelphia and New York, 1902.

The demand for a fourth revision within four years testifies that this manual is a most helpful assistant to the busy physician. The opportunity afforded the author has been utilized to introduce these newer remedies which have successfully stood the test of practical experience and to add certain formulæ containing older drugs under new combinations which have been found to possess marked therapeutical efficacy in particular conditions.

A MANUAL OF THE PRACTICE OF MEDICINE. Prepared especially for students. By A. A. Stevens, A. M., M. D. Fifth edition. Revised and enlarged. Philadelphia. W. B. Sanders. Price, $2.00 net.

It is well for every practitioner to possess one or more manuals to read with an eye to keeping up with the current of medical and surgical thought and progress. Stevens is a good one for this purpose. It is brief but comprehensive, and is very readably written. It is not intended to take the place of more ambitious works, but it has a clearly defined sphere of usefulness.

The February *Scribner* contains: "Washington, a City of Pictures," by Frances E. Leupp, illustrations in tint by Jules Guerin; "The Proposed Isthmian Canal," by William H. Burr, a member of the Isthmian Canal Commission, is a very interesting paper. It is profusely illustrated by photographs and drawings by A. E. Jameson, and contains map and profiles from official sources. The second paper of "The American Invasion of Europe," by Frank A. Vanderlip, formerly Assistant Secretary of the Treasury, deals with trade conditions in Italy, Austria and Germany. Two fiction stories—"In Oklahoma," by Cyrus T. Brady, with illustrations by Henry W. Carter; "The Nerve of the Upjohns," by Frances Lynch, illustrated by Edwin B. Child.

Medical News and Items.

Smallpox is prevalent in Philadelphia.

Witch doctors are quite numerous in Jamaica.

The Philippines are being ravaged by smallpox.

The year 1901 gave birth to 5,500 new M. D.'s.

Tuberculosis causes 38 out of every 100 deaths in the Hamburg Marine Hospital.

Dr. T. Evans McBrayer, of Shelby, N. C., has been made surgeon to the S. C. & G. E. Railroad.

The death rate in Russia is higher than in any other country; the average life is only 29 years.

A four-year course of study is compulsory in 153 of the 155 medical colleges in the United States.

By a recent ruling of the Immigration Commission at San Francisco, ailing consumptive emigrants will not be permitted to land.

It is said that Johns Hopkins Hospital uses no drugs in the treatment of typhoid fever, and yet has a larger percentage of cures than any other hospital in the country.

The open-air treatment for consumptives is getting quite popular. A colony has been formed for the purpose near Plymouth, Mass.

Ice applied to the external genitals —the scrotum in men, the labia in women —is said to be the best and simplest method for controlling blood-spitting and nosebleed.

An English millionaire, Mr. W. H. Sutton, left in his will seven and a half millions of dollars for building houses for the working classes. This is by far the largest gift devoted to such a purpose.

"Some years ago," said Bishop Potter, in a recent speech, "I was traveling in Minnesota. A man approached me on the railway platform and scanned my features closely. 'Excuse me,' he said, finally, 'but haven't I seen your picture in the papers?' I was compelled to confess that he might have done so. 'I thought so,' continued the inquisitive one. 'May I ask what you were cured of?'"

Dr. Hare's Unfortunate Experience.—Dr. H. A. Hare, of Philadelphia, while riding a few days ago in an automobile he was testing, was, by

mistake, apprehended for another chauffeur, on account of fast riding. Despite his protestations, Dr. Hare was taken in a patrol wagon to the police station, where he was confined for an hour without being permitted to communicate with his counsel or his family, until released by the intervention of friends who had learned of his misadventure.

A Fool Physician's House Burned.—The house of a physician in Appleton, Wis., was destroyed last week by fire, which was suspected to have been of incendiary origin, there having of late, been numerous threats against the man. He is said to be a disbeliever in the contagiousness of smallpox, and, in order to prove the correctness of his theory, smeared himself with the secretions from smallpox lesions, and then started on a visit to several towns about his home. Smallpox prevails extensively now in that region, and many of the friends of the sufferers have attributed the epidemic to this doctor's freak experiment.

This is the day of freak faddists in all sorts of cure-alls, and the latest is one for the cigarette and liquor habit, and who claims also that the children are going to destruction in consequence of their faulty feeding. If one would take account of all the propositions of these freak reformers in diet, and attempt to live in accordance with their rules and regulations, in some cases they would be reduced to a diet of atmospheric air in restricted proportions. The truth lies between the two extremes in respect to dietetics, and if one will do the best for his patient, he will individualize each case for diet as he would for medicine. There is no broad road for either.—*Med. Times.*

Last sumer the Superior Council of the Paris School of Fine Arts had under consideration the question of employing the academic loin covering (*calecon*) for models posing in the presence of the women pupils who are now admitted to the school. The representative of these ladies has solved the difficulty by a letter addressed in their name to the Superior Council, in which she says: "We demand to be treated like the women-students of medicine. Do they put drawers on the subjects in the schools? We study what they do, but from a different point of view. That is all." This argument has prevailed, as indeed it ought to, and the Superior Council has prescribed the calecon.

According to the *Lancet's* Berlin correspondent, Dr. Garnault, the French medical man who offered himself to Professor Koch for experiments on the identity of human tuberculosis and perlsucht, has arrived at Berlin. He had a long interview with Professor Koch, the language used being English, as Professor Koch does not speak French, neither does Dr. Garnault speak German. Professor Koch declined to give injections to Dr. Garnault, and advised him, if he really wished to do something toward the elucidation of the question, to drink unsterilized milk from a tuberculous cow for about a year, and to abstain as much as possible from other foods. Dr. Garnault agreed to do so, but in addition will have an injection of highly virulent perlsucht bacilli performed every month.—*Medical Times.*

SCIENTIFIC BREVITIES.

The rays given off by radium and similar substances, which are so similar to the x-rays in their action, have been shown by Berthelot and Becquerel in France, in recent reports to the Academy of Sciences noticed in *The American Journal of Science* (January), to have interesting chemical powers. Their effect on iodin pentoxide and on nitric acid resembles that of ordinary light, but various chemical actions that are produced by light are not brought about by the rays at all. They produce ozone and have strong coloring action on glass, porcelain, paper, and rock-salt, while their destructive effect on the skin is very noticeable. Seed exposed to the new radiation will not germinate, so injurious is its effect on organic life.

In a recent issue of *The Journal* of the Worcester Polytechnic Institute, C. M. Allen describes how the steam engine indicator may be made to record the work done by an oarsman in a boat. "The boat to which the apparatus is applied has a rowlock held in position by a system of levers, and the end of which had a bearing upon the piston of a Crosby indicator. The drum of the indicator was driven by the reduced horizontal motion of the oar. With such arrangement on each side of the boat, the coach is enabled to indicate the exact amount of pull that is put into the oar at each point of the stroke; to measure with great accuracy the exact length of the stroke, and form an examination of the curve to determine the proper location of the foot-rests and the rowlocks relatively to the seat so that the maximum effect may be produced by the man in accordance with his reach."

"The close attention which the Emperor of Germany gives to scientific and technical subjects, and the personal interest he takes in the work of men who study them, have been shown on many occasions," says *Nature*. "The latest instance occurred when, attended by a large naval staff, he was present at the annual meeting of the Society of Naval Architects. . . . *The Times* correspondent at Berlin states that the chief item in the programme was a lecture by Geheimrath Brinkmann on the changes which have been adopted in the disposition of guns in battleships and the results of these changes upon naval architecture. . . To the surprise of the audience, the Emperor ascended the platform, and, after beckoning all who were present to remain seated, spoke upon the subject of the influences of military requirements upon the development of naval construction and the disposition of artillery on ships. The presence of the Emperor at scientific and technical meetings is itself a mark of sympathy with their aims; and when, in addition, he shows himself keenly interested in the subjects discussed, the influence upon the public mind must be very great. To this influence must partly be ascribed the regard in which scientific investigation is held in Germany."

A VALUABLE PILL FOR PHYSICIANS PRESCRIBING

PIL. ANTISEPTIC COMP.--Warner

FORMULA.

Acidium Salicylic.....1 gr.
Sodium Sulphite .....1 gr.
Pepsin Conc't .....1 gr.
Capsicum .....1-10 gr.
Ext. Nuc. Vom. .....1-8 gr.

A Scientific combination, assuring absolute therapeutic effects indicated in DYSPEPSIA and INDIGESTION, particularly when attended with acidity of the stomach.

Please Specify "WARNER & CO." and Avoid Substitutes.

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SUPERIOR TO PEPSIN OF THE HOG

A POWDER PRESCRIBED IN THE SAME MANNER AND DOSE AS PEPSIN, WITH BETTER RESULTS.

A SPECIFIC FOR VOMITING IN PREGNANCY

WM. R. WARNER & CO.

PHILADELPHIA. NEW YORK. CHICAGO.

THERAPEUTIC HINTS.

Treatment of AcuteBronchial Catarrh.

Yeo recommends the following:

℞	Vini antimonialis	ʒ ii	8
	Spts. etheris nitrosi	ʒ iv	16
	Liquoris ammon acetatis	ʒ ii	64
	Tinct. camph. compos.	ʒ ii	8
	Aquæ q. s. ad	ʒ viii	256

M. fiat mistura. Sig.: Two tablespoonfuls every three or four hours.

The following containing spirits of chloroform is sometimes employed by him to allay the cough:

℞	Ammon. carb.	gr. xxxii	2 | 12
	Tinct. scillæ	m. lxxx	5
	Spirits chloroformi	ʒ ii	8
	Infusi senegæ q. s. ad	ʒ viii	256

M. Sig.: Two tablespoonfuls every four or five hours.—*Journal A. M. A.*

Treatment of Atonic Amenorrhea.

The following is recommended by "Encyclopedia of Medicine" in treatment of atonic amenorrhea:

℞	Tinct. ferri chloridi	ʒ iii	12
	Tinct. cantharidis	ʒ i	4
	Tinct. guaiaci ammon	ʒ iss	48
	Tinct. aloes	ʒ ss	16
	Syr. simplicis q. s. ad	ʒ vi	192

M. Sig.: One tablespoonful in water three times a day; or:

℞	Ext. aloes	ʒ i	4
	Ferri sulph. exsic	ʒ ii	8
	Asafetidæ	ʒ iv	16

M. ft. pil. c. One pill after each meal, increased to three.

In Pleurisy With Effusion.

℞	Ammon. chloridi.	
	Ammon. carbonatis	āā ʒ i.
	Tinct. cubebæ	ʒ iiss.
	Syr. tolutani	s. q. ad ʒ ij.

M. S. Teapoonful in water every three or four hours. —G. F. Butler.

In Dry Pleurisy.

℞	Tinct. aconiti	m. x.
	Spir. æth. nitrosi	ʒ ij.
	Liq. potass. citratis	ʒ iij.
	Syr. tolutani	s q. ad ʒ iv.

M. S. Two teaspoonfuls every hour.

London Cough Mixture.

℞	Ac. benzoici	gr. xij
	Ol. anisi	m. ij.
	Srir. ammon. aromat	ʒ iss.
	Sir. æther. nitrosi,	
	Vini ipecacuan	āā ʒ iij.
	Tinct. capsici	m. xx.
	Glycerini	ʒ iv.
	Infus. senegæ (conc.)	ʒ iij

M. Allow to stand until clear and decant.
S. Teaspoonful every three hours.

Regarding Pepto-Mangan (Gude), it affords me much pleasure to inform you that I prescribe your preparation almost daily. It combines palatability, which is of especial importance in pediatric practice, with most remarkably prompt efficiency.

Dr. Ruedell.

Rhaunen, August 16, 1901.

It affords me much pleasure to inform you that my experience with Pepto-Mangan (Gude) has been very favorable, the patients tolerating the preparation very well; in fact, they took it gladly. In all cases I was able to observe an improved appearance and an increase of appetite and weight. I therefore employ your preparation in all cases in which iron is indicated, both in children and adults, and have recommended it to my colleagues.

Dr. W. Schlessinger.

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Beef, Iron, Cinchona and Brandy go to make it. Any one of these given alone would do good. Consider, then, how much the benefit could be increased by combination!

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Newer Materia Medica.

Some Obstinate Bladder Cases.

By George W. Hopkins, M. D., Cleveland, Ohio.

John C., age 31; occupation, patrolman. Following exposure, patient experienced bladder symptoms as follows:

Frequent urination, tenesmus, hypogastric pain and a temperature of 101.4 degrees.

The urine was scanty, turbid and loaded with mucus.

Diagnosis: Acute cystitis.

Treatment consisted of rest in bed, restricted diet, anodynes for the tenesmus, diluent and alkaline drinks.

The acute symptoms promptly subsided, but the urine continued abnormal despite the general measures employed and the internal administration of urinary antiseptics.

Irrigation with boric acid solutions of varying strength proved unsatisfactory, as did also solutions of potassium permanganate and silver nitrate similarly applied.

A twenty per cent. solution of Glyco Thymoline was then substituted for irrigation, and the improvement was marked and continuous until recovery was perfect.

Harry R., age 43; occupation, bookkeeper. Had a history of bladder trouble of several years duration.

His urine was blood-tinged and loaded with mucus. Microscopic examination revealed an abundance of ammonia, magnesium phosphates, numerous disintegrating pus corpuscles, blood corpuscles and blood shadows.

Repeated examinations with the sound gave negative results, but a skiograph taken with a high vacuum hard tube revealed a small calculus which had persistently evaded the sound on previous examinations. Lithotomy was performed and calculus removed but the urine failed to return to normal.

Irrigation in turn with boric acid, potassium parmanganate and silver nitrate solutions proved unsatisfactory.

Glyco Thymoline irrigations proved satisfactory from the start and recovery was ultimately perfect.

William L., age 55; occupation, saloonkeeper. Had a history of repeated attacks of gonorrhœa, which were never appropriately treated.

Urine was voided with great difficulty, at frequent intervals and loaded with mucus. Reaction was alkaline and the microscope revealed an abundance of amorphous phosphates of calcium and magnesia, flat epithelial cells, disintegrating pus corpuscles and indigo crystals.

Examination confirmed diagnosis of chronic cystitis due to urethral

tricture and hypertrophied prostate.

Catelectrolysis by the slow method removed the stricture and Bottini's operation relieved the enlarged prostate but the urine failed to clear up as desired.

The cystoscope showed marked changes in the bladder walls, but catheterization of the ureters yielded negative results.

Appropriate urinary antiseptics were administered internally and silver nitrate solutions by vesical irrigation with only slight improvement.

Irrigation with twenty per cent. solutions of Glyco Thymoline gave early and continuous improvement until recovery was perfect.

Tonics That Do Not Tone.

W. C. WILE, M. D., Danbury, Conn.

The tendency of the medical profession at the present time (especially that particular part relating to practice, pure and simple), is toward refinement of diagnosis and more accurate therapeutics. By refinement of diagnosis, I mean a grasping after a more thorough knowledge of what symptoms mean, and a laying-hold of all manner of things which can be found in the clinical, physiological and pathological laboratory to assist in the diagnosis. The modern, up-to-date doctor uses everything within his reach toward the end of curing his patient, and the vital statistics go to show that he is very successful, hence a much lower death rate. This is the very best proof in the world of the rapid strides medical science has made in the last decade.

By more accurate therapeutics I mean that the doctor is not content to wait as did the doctor f old days.

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Modern pharmacy and chemistry, the two hand-maidens of therapeutics, have kept pace with the refinements of diagnosis, and to-day in the field of new remedies we have a host of things that are indispensable in the successful treatment of disease, and no one knows this better than does the successful practitioner. Neither must the remedy now, in order to procure favor in the eyes of the profession come from some German laboratory, or foreign country, nor is it necessary to be new at all, for old remedies of tried and known values put up in palatable form, or improved by new processes of manufacture so as to bring out the latent powers, are equally welcome.

In a long and active practice of over 30 years, I have many times wished that I could make my patients eat. I found too many tonics *that did not tone,* or if at all, only toned after a long period of taking. What I wanted (and what other doctors want), was something that would make the patients eat and eat right away, just as the cocktail acts on the clubman. The great trouble with all tonics is that they take too long to act, or do not act at all. Their number is as vast as the sands of the sea, and if the remedy is not right, the patient is druggged for nothing. It was not until I came across apetol that I found the ideal tonic, *the tonic that tones, the tonic that makes my patients eat and eat at once.* I found it palatable; that it was antispasmodic; that it excited the secretion of the gastric juice thus facilitating markedly the digestion of food. I found it stimulated the digestion in the small intestines.

It relieved flatulence. My patients were cured of dyspepsia, and both they and I were happy. But best of all, it made them eat. When they ate, they digested their food and got strong. A wineglassful ten or fifteen minutes before each meal did the work every time. No failures, whether it was the weak stomach of the convalescent, the indifferent stomach of the dyspeptic, the catarrhal stomach of the drinker, or the healthy stomach simply out of gear, they each ate—*and got better.*

The formula as given by the manufacturers is as follows:

Nux vomica, gentiana purpurea, calumba jateorrhiza, quassia amara lignum, prunus virginiana, prinos verticillatus, simaruba amara, spiræa tomentosa, cinchona, rubrum, sumbul, moschatus, aurantii cortex, aromatics, vinum xericum fortior.

In looking the same over it will be seen at a glance that the different ingredients are old friends. Not so much friends of this generation of doctors as of the last, by whom they were held in high esteem. In their present shape they have all of their good tonic properties retained and all their inert principles removed. This is the secret and the only one in relation to apetol, a particularly delicate and painstaking pharmaceutical preparation, and it has brought forth a real sheet anchor for the busy doctor, and when administered properly will make his patients *eat at will.* There is no reaction from its use, and in neurasthenic cases it is a boon. It not only whets the appetite, and gives us improved nutrition, but it is also soothing and stimulating in its effect.

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Grippal Cough-Laryngitis-Bronchitis.

In these affections antikamnia is indicated for two reasons: First, because of its absolute power over pain; at once removing this element of distress and placing the whole system in the best possible condition for a speedy recovery. And, second, because of its power to control inflammatory processes, lowering the fever by its peculiar action on the nervous system. Codeine is strongly indicated because of its power as a nervous quietant, often quickly and completely controlling the cough. In nervous coughs, irritation of the throat, laryngitis, bronchitis and phthisis, where the cough is altogether out of proportion to the amount of expectoration, Antikamnia-Codeine tablets will give prompt satisfaction. In fact, in cases of nervous coughs, irritable throat, so commonly attendant upon influenza and la grippe, as well as in sub-acute laryngitis, and slight bronchitis, this tablet alone will often so control the cough that the disease rapidly subsides. This is not strange when we remember that nothing could keep up this irritation more than constant coughing. In the more severe cases of bronchitis and in phthisis the patient is not only made more comfortable, but the disease itself is brought more directly under control by checking the excessive coughing, relieving the pain and bringing the temperature down to the normal standard.

An Addition to Our Next Materia Medica Earnestly Recommended.

For many years I have prescribed Sanmetto extensively, and I should assassinate truth were I to assert that, in a single instance, the results were otherwise than wholly satisfactory. There is not a form of genito-urinary inflammation wherein I have not used it. I can sincerely and earnestly recommend its addition to our next Materia Medica.

A. Mazetta Rowe, M. D.
Glasgow, Ky.

Sanmetto in Enlarged or Atrophied Prostate, With Urinary Difficulties.

The cases in which I have had occasion to use Sanmetto are quite numerous and varied, both acute and chronic, and when indicated have produced very satisfactory results, both to me as well as to the patient. For a period of three years Sanmetto has been my sheet anchor in the large majority of cases of prostatic and urinary difficulties, both in enlarged prostate as well as atrophied conditions. I may sum up the whole catagory of prostatic and uri-

nary ailments, and say in my experience that Sanmetto covers more general indications and is more reliable in my hands than any other remedy. I use and have great confidence in Sanmetto.

J. S. FISHER., M. D.
1876 Pulte Med. Col., Mem. Nat. Homeo. Med. Assn., Mem. Ohio State Med. Soc., and N. W. Ohio Med. Soc. and Toledo Med. Soc.
Toledo, O.

A Lesson From the Masters.

The study of the practice and teachings of the really great men in medicine is a fruitful source of knowledge and practical guidance in the management of disease. Two principles are clearly recognizable; first, that nature possesses the ability to successfully combat the acute infectious diseases without the necessity of resort to powerful drugs for the relief of symptoms; second, that treatment is most successful which is most simple and which has for its object the reinforcement of nature's efforts of antagonizing the encroachment of disease processes. Application of these principles constitutes the most successful methods of treating influenza, pneumonia, bronchitis and the numerous winter diseases associated with inflammation of the respiratory organs.

One method of treating these conditions is by administering a powerful and, in truth, a depressing drug for practically every simptom, e. g. opium in some form to control cough, a cardiac and metabolic depressant to reduce fever, stomach-disturbing remedies as expectorants, etc. This plan of treatment is, authorities assert, antiquated, irrational and ineffective. On the contrary it is a matter of absolute fact, proven by experience, that if a patient with pneumonia, influenza, severe bronchitis, is properly nursed, given adequate easily assimilated nourishment and be given Gray's Glyc. Tonic Comp. in dessert to tablespoonful doses every three or four hours, that patient will withstand the attack much better and be surprisingly free from the pronounced depression which accompanies and succeeds these diseases. This plan of treatment has also the great advantage that the patient is spared the baneful effects of excessive drugging.

Gray's Tonic not only fortifies the patient's strength, aids digestion and assimilation, but has an unquestionable influence in palliating the symptoms of respiratory inflammation.

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Substitution extraordinary is illustrated in a history supplied by the Farbenfabriken of Elberfeld Company, who have been able to ferret out a most despicable adulteration of chemicals practiced by a band of drug counterfeiters. Not only were the products themselves imitated, but the boxes, labels, etc. Druggists buying aristol, phenacetin, sulfonal, trional, etc., should be on their guard against sophisticated articles. The protest of the manufacturers rightly contends that "both the physician's reputation and the welfare of his patient are at stake in this matter. When, therefore, we protect ourslves against these criminal practices, we believe that we are equally protecting the medical profession."—Editorial, *Am. Medicine,* December 21, 1901.

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DR. S. F. ROGERS,
Troy, N. Y.

I have used sabalol spray in my own case with great relief. The year the influenza was epidemic—1890, I believe—I had a very severe attack, which left me with a very dry condition of the nostrils and a small spot on septum which would not heal, bleeding very often. I tried everything, besides outside treatment from others, but until I used sabalol spray failed to find anything that proved of any permanent benefit.

DR. J. E. GRISWOLD,
Portland, Conn.

An Upbuilder in Post-Grippal Cases.

Very many of our readers know, by reputation, at least, Dr. A. H. Chmann-Dumesnil, one of the foremost physicians of St. Louis. From a letter of recent date we are permitted to quote the following, which we do with pleasure. "I needed a roborant, and took, with much benefit to myself, Hagee's Cordial Cod Liver Oil Compound. Since then I have had occasion to use it in a number of cases of grippe, and in all of them the results were of the best. The action of this preparation is rapid and thorough; and in a remarkably short time a case is recovered. It is certainly the remedy par excellence for this now prevalent affection.

In a number of post-grippal cases in which enteric neuralgia, bronchial involvement, and a number of nervous symptoms manifested themselves I have found this preparation equally effective. It is an excellent up-builder, and rapidly restores to its former condition the weight which has been diminished by the waste of tissues consequent to grippe."

This is certainly very high praise and from an eminent authority.—*Massachusetts Medical Journal.*

Suggestion—Ecthol in Smallpox.

Messrs. Battle & Co., of St. Louis, Mo., manufacturers of Ecthol, an anti-purulent of wonderful efficiency, have issued a brochure on smallpox, written by Dr. J. A. Knight, of Eatonville, Ga., in which is given, in concise form, many valuable points regarding this disease. In the treatment, the writer strongly recommends Ecthol.

In the same brochure is a report of cases by S. A. Mallory, M. D., Caswell, County, N. C., who has seen over two hundred cases of smallpox during the last six months, and has had gratifying results in confluent and discreet cases from the use of Ecthol.

Write Battle & Co., mentioning this Journal, and obtain a copy.

Peacock's Preparations Invaluable.

I have no hesitation in saying that I consider Peacock's Bromides invaluable and have for years used it

exclusively in my sanitorium when bromides were indicated. Commercial bromides are crude and rank as compared with Peacock's. The greatest danger of injury to the patient and the product lies in substitution. I now only buy from my wholesale druggists in dozen lots.

ALLAN MOTT RING, M. D.
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I am more than pleased with the physiological action of Seng in the treatment of chronic indigestion. It seems to nicely restore the action of the stomach, re-establish perfect digestion and its good effect is quickly evidenced by the general improved appearance of the patient.

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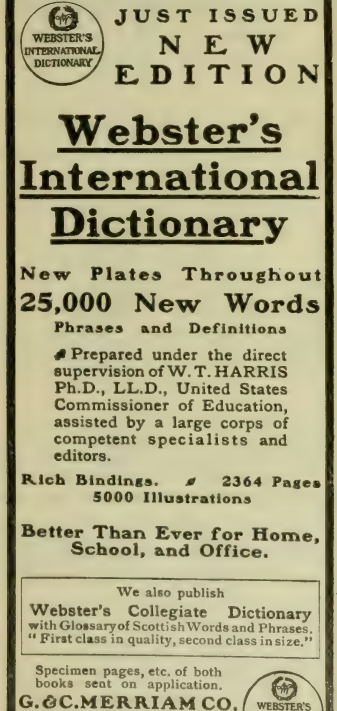
I also found this happy combination exceedingly valuable in the troublesome, dry, so-called stomach cough following la grippe, and supposed to be dependent on irritation of the pneumo gastric nerve.

CHS. BREWER.
Resident Physician, N. J. State Prison.

A woman whose doctor asked after her health replied dolefully: "I feel very well; but I always feel bad when I feel well, because I know I am going to feel worse afterwards."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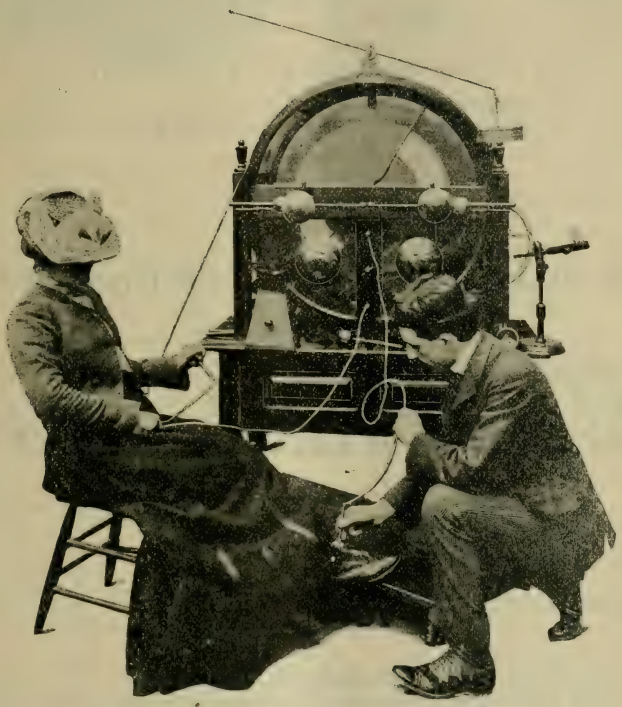

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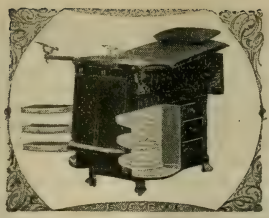
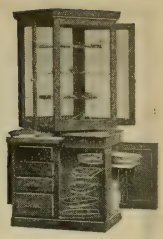

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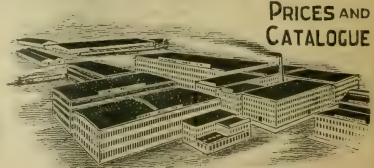

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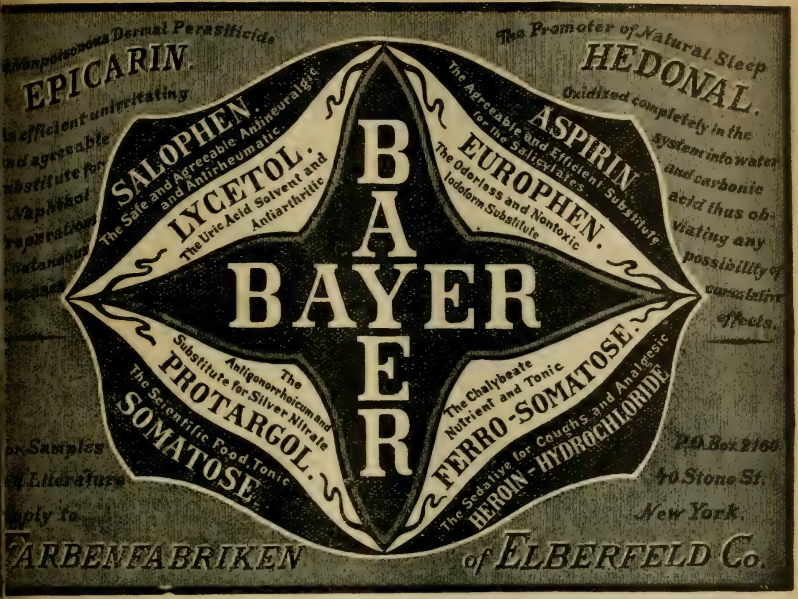

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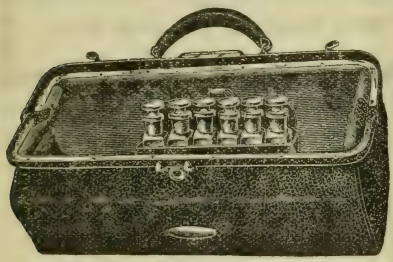

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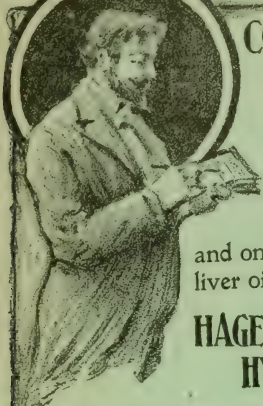

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(Author's Abstract.)

In the *International Medical Magzine* for October, William S. Gottheil calls attention to the frequent insignificance and fugacity of the syphilitic initial lesion, which leads to its non-recognition in quite a large proportion of cases. Ignorance of its occurrance, and not voluntary falsification, is the cause of the frequent absence of a syphilitic history in undoubtedly specific cases. The author calls attention to the following points of diagnosis:

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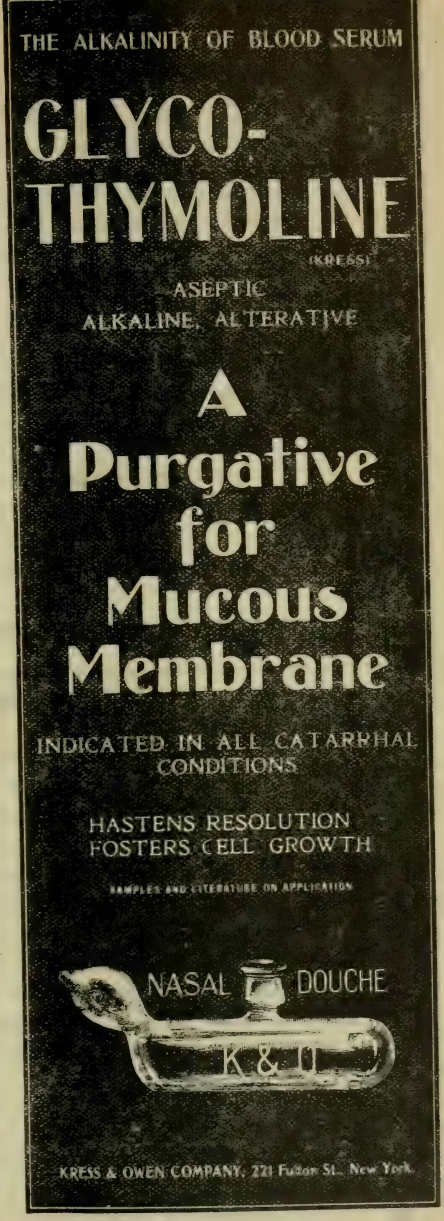

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EDITORIAL.

OPERATION UPON THE HINDOO TWINS.

This operation was performed by Dr. Doyen on February 9th, who was connected in a rather sensational way with the Dreufus case, taking an x-ray photograph of the bullet lodged in the back of Dreyfus' attorney, Labouri. The operation lasted twenty minutes, and the following is the report given by Dr. Doyen, in the *Echo de Paris,* and copied by the *Journal of the American Medical Association*:

"The two sisters were placed on a table covered with a sterilized cloth. I placed myself to the right and cut the skin above the connecting ligament. A certain amount of cartilage was cut through with a lancet. Two little veins alone had to be tied. The peritoneum was then cut and the hepatic band which always exists in such cases was laid bare. There were certain adherences on the side of Doodicia, who as the diagnosis had shown, was suffering from tubercular peritonitis. The hepatic bridge was 7 centimeters long and 4 centimeters in diameter. It seemed very vascular. This was a case for the employment of the method of hemostasis which I have invented, by the crushing of the hepatic pedicles with my double-lever forceps, which gives instantly, under an effort of the hand, a pressure of 2,000 kilograms. The hepatic pedicle was superficially fibrous. The crushing was carried out with great prudence, and succeeded so well that two ligatures of catgut *en chaine* sufficed for Radica. The pedicle, which was very short, was cut between this first ligature and Doodica, and three voluminous arteries were immediately

siezed with pincers and tied up. The hemostasis, on the side of Doodica, was completed by two ligatures *en chaine*. The back part of the peritoneum, that on the side of Doodica, and then the skin, were severed with a few cuts of the scissors. Doodica, liberated from her sister, was carried to a neighboring table, a compress was placed on the wound, and the skin temporarily fastened over it with pincers. The operation was then terminated on Radica, the hemostasis verified, and the abdominal partition was sutured, leaving a morsel of sterilized lint to drain the wound."

The campaign against smallpox continues all over the country with unabated vigor. On the whole, reports indicate that the disease is fairly well under control. Only 62 new cases were reported in Philadelphia for the week ending March 1st. In Camden there were only 25 cases in all, while 7,000 people had been vaccinated at a cost to the city of $3,500. From the reports of the Illinois Board of Health, it appears that the physicians of certain counties of that State have unwittingly contributed to the spread of the disease by confounding it with the time-honored fetish of "Cuban itch," or "Illinois scratches," while not a few failed to distinguish it from varicella.

In Ohio a physician was indicted and tried before a jury for suppressing a case of smallpox, which occurred in his own family in the person of his wife. In spite of the fact that several experienced members of the Board of Health testified to the nature of the disase, the jury evidently believed the defendant, who held out that the disease was not smallpox and he was acquitted.

Another physician of Brooklyn was recently convicted of a similar charge and fined $50 for failure to report a case which he at first called diphtheria, but subsequently recognized as smallpox. Meanwhile the noisy, but comparatively few anti-vaccinationists have been compelled by the logic of events to suppress, in a great measure, their clamor, and no doubt if the facts were known, have, in not a few instances, themselves sought refuge in an artificially conferred immunity. Many Western State boards have undertaken a campaign of education along this line, and have scattered broadcast appropriate literature on the subject. The work of this kind which has been done in this State by our own Board of Health, through its publication, the "Bulletin," should be appreciated by our people and by the profession.

Crankism in medicine has lately received several set-backs. The prevalence over the entire country of smallpox has resulted in a general enlightenment of the public mind upon the question of vaccination and its undoubted value to the race, while a chosen disciple of Mrs. Eddy, a judge, and hence it is fair to infer, a man of education and of acquirements in matters within his own scope, stood before an audience to prove to them the non-existence of matter, of pain and of sickness, and had to be transported from the platform suffering apparently from what in ordinary parlance would be called

a stomach-ache. The effort of the Boston physician to show in his own person the futility of vaccination and the non-contagiousness of smallpox, only resulted in his contracting a violent case of variola.

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Under present conditions few journals can live upon the receipts from their subscribers. Therefore advertising patronage is necessary. In order to hold such patronage it is necessary that the advertiser shall have some evidence that his money is profitably expended. A number of the most reliable manufacturers and dealers in goods that are of interest to physicians are patrons of the JOURNAL. Each reader will, without doubt, find something among these advertisements that particularly interests him. Then he can greatly aid the growth and influence of the JOURNAL by mentioning where he saw the advertisement, whenever he addresses the firm for information or with an order. This much reciprocity is honest and fair to the advertiser as well as of assistance to the JOURNAL, and it is hoped that the JOURNAL readers will not neglect this duty.—*Maryland Medical Journal.*

(We hope our readers will keep above facts in mind and thus co-operate with us.—Ed.)

To Whom it May Concern.

All delinquent subscribers are earnestly besought to promptly pay up their subscriptions. The sum is insignificant to any one person, but the aggregate of all subscriptions due is very large. And not even an editor can live on air—all the time. Like all men he needs an occasional change of diet.

THE OUTLOOK in its March magazine number has no less than ten illustrated special features—certainly a good showing as to quantity in a magazine, which is also a weekly newspaper, and devotes even in its "magazine numbers" large space to current topics, editorials, and book reviews. Among the illustrated articles of this month are: Two College Presidents (Mark and Henry Hopkins); Edward Everett Hale's "Memories of a Hundred Years"; E. A. Steiner's "Crackow and Polish Patriotism"; Poultney Bigelow's "Henry, the Sailor Prince"; W. A. Brown's "Some Rare Musical Instruments", and Clifton Johnson's "When the White Mountains are White."

March SCRIBNER'S contains an illustrated paper on "The Heart of England," by John Corben, being a description of London's shipping. "The American Commercial Invasion of Europe," by Frank A. Vanderlip—third paper—deals with trade conditions in England, France and Russia. Fiction is represented by "The Bar Sinister," by Richard Harding Davis; "The Echo in a Boy," by William B. McHary; "The Emancipation of Theororus," by Clara Bellinger Green. Daniel C. Gilman, ex-president of Johns Hopkins tells interestingly of "The Launching of a University," and Ethel Wharton contributes an illustrated article on "The Sanctuaries of the Pennem Alps."

The Carolina Medical Journal.

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Illustrations necessary to elucidate the text will be provided without expense to authors when suitable ink drawings or photographs are furnished.

Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

Cancer Cases—Reported to Illustrate Method of Diagnosis and Technique of Surgical Treatment.

BY STUART MCGUIRE, M. D., Professor of Principles of Surgery and Clinical Surgery, University College of Medicine; Surgeon in Charge St. Luke's Hospital, Visiting Surgeon Virginia Hospital, etc., Richmond, Va.

A short time ago the writer read a paper before the Medical Society of Virginia entitled, "The Past, Present and future of Cancer." In this paper, he endeavored to review the history of cancer, to call attention to the recent views of the etiology of the disease, to state the present accepted principles of its treatment, and to suggest the possible developments of the future.

This paper is intended as a sequel to the first, and consists in the report of operations recently done for cancer, the cases being selected to illustrate the symptoms upon which the diagnosis was based and the method of removal that was practiced.

As might be expected, the cases chosen were successful ones, at least as far as recovery from the operation was concerned. No claim is made for cure, as sufficient time has not elapsed to render recurrence of the disease improbable or impossible.

The writer is keeping a careful record of all his operations for cancer, and hopes in a few years to be able to present a third paper giving the history of the cases. He is firmly convinced that in the past the permanent results of operations for cancer have been better than is generally supposed, and this statement would have been demonstrated if sur-

Paper read at meeting of the Tri-State Medical Association of the Carolinas and Virginia, held in Asheville, N. C., February 25-27, 1902.

geons had followed up all their cases, instead of letting a certain portion of their cases follow them up. He is also convinced that in future the results of operations for cancer will be better than is generally expected, and this prediction is based on the belief that the general practitioner will learn to diagnosticate the condition earlier, and the surgeon will adopt more radical methods for the removal of the disease.

CASE I.—*Cancer of the Skin.*

Mr. R., aged 63, gave the following history: Two years before his admission to the hospital he bruised a wart on the back of his right hand and a small sore resulted. It gave little trouble but refused to heal. It soon became covered with a crust or scab, and bled whenever it was removed. It slowly but steadily increased in size. At first it was dry, but of late it had suppurated freely. On examination an ulcer two and a half inches in diameter was found. Its edges were indurated but there was no enlargment of adjacent glands. A diagnosis of epithelioma was made, based on the age and history of the patient and the appearance of the growth. Syphilis was excluded by absence of other lesions, and tuberculosis by progressive extension of the ulceration without any attempt at repair.

The hand was carefully cleaned with soap and water and treated for several days with moist antiseptic dressings. A circular incision was made around the diseased tissue through the entire thickness of the skin and the area dissected out, exposing the extensor tendons beneath it. Bleeding was stopped by torsion and pressure, and a moist dressing applied, consisting of cotton soaked in a 1 to 250 solution of chloral hydrate. This dressing was changed daily, and at the end of a week all suppuration had ceased and the wound was filled with healthy granulations to the level of the skin. By a second operation the bare surface was covered with skin grafts. Thin sheets of cuticle were cut with a razor from the deltoid region of the left arm and accurately placed in position. They were retained and protected from overlying dressings by narrow strips of rubber dam. In three days the grafts assumed the pinkish color of the surrounding skin, and in ten days the wound was well and the patient discharged.

In this class of cases the advantages of excision over caustics or the cautery are obvious. With the scalpel the diseased tissues can be accurately and entirely removed. The pain is less and a clean wound is left instead of a sloughing eschar. New and healthy skin can be planted upon the surface, lessening convalescence by weeks or months and leaving smooth skin in place of an unsightly scar. Lastly the disease is far less likely to return either in the graft or clean cut margin than in the scar, the result of a slowly cicatrizing and often infected burn.

CASE II.—*Cancer of the Lower Lip.*

Mr. C. R., aged 38, stated that ten months ago he had noticed a little ulcer on his lip which he at first thought was a "fever blister" from indigestion, and later attributed it to irritation from smoking. It refused to yield to treat-

ment, however, and had gone through the characteristic stages of induration, scab formation and ulceration. On examination an angry sore was found, the size of a half dollar, with elevated edges and accompanied by induration which extended almost to the point of the chin. The submental and sub-lingual glands were enlarged and hardened. A diagnosis of carcinoma was made, but as the patient gave a history of syphilitic infection a small section of the growth was removed and submitted to microscopic examination. The result being confirmatory, an operation was advised and agreed to. After a day or two of preparatory treatment, during which, in addition to the usual measures, the frequent use of an antiseptic mouth wash was prescribed, the patient was placed in a semi-recumbent position on the table. Owing to the size and location of the induration an excision of the usual V-shaped piece was not considered adequate, hence two vertical cuts were made from near each corner of the mouth to the level of the chin and their lower ends united by a transverse incision. The rectangular section of tissue thus outlined was dissected free from the underlying attachments and removed. Hemorrhage during this stage of the operation was controlled by an assistant, who, with thumbs inserted in the mouth, grasped and compressed the coronary arteries. All bleeding points being tied, the sub-mental and sub-maxillary spaces were cleared of their contents. The deformity which resulted was corrcted by Langenbeck's method, drainage being introduced at the most dependent part of the wound, and approximation being effected with silk worm gut and horse hair sutures. The surface was coated with collodion and a loose absorbent dressing applied. The patient was fed on liquids through a tube for several days. The disfigurement from the operation was much less than anticipated.

CASE III.—*Cancer of the Tongue.*

Mrs. B., aged 32, stated that a year or more ago a small ulcer developed on the side of her tongue, which persisted and refused, to heal. It gradually grew larger and ulcerated. When she entered the hospital the tongue was so infiltrated that speech was inperfect. There was constant radiating pain in the throat and face, some dribbling of saliva, and a foul, offensive odor from the mouth. A section of the growth was examined by a microscopist and pronounced epithelioma.

After carefully considering the case it was decided to do Whitehead's operation, and if possible, to leave one-half of the tongue.

The patient was anesthetized and placed in a semi-recumbent position. A preliminary tracheotomy, or ligation of the lingual artery was not deemed necessary. The jaws were separated with a gag, and the cheek pulled back with a retractor. The tongue was caught at its tip with volsella forceps and pulled forcibly forward. It was split from behind forward in the median line with a bistoury, care being taken to carry the incision well back of the growth. The diseased half of the tongue was then freed with scissors from its attachment to the mouth at the frenum and anterior pillar of the fauces. The sub-lingual muscles were then

divided with the same instrument. Strong traction was then made, and the half of the tongue to be amputated was drawn so far forward that the remainder of the operation was practically extra oral. A transverse incision was made with a knife well behind the growth at first dividing only the mucous membrane. A curved homostatic forcep was then clamped in the groove, thus securing the main artery, and the amputation completed. The artery was then tied and torsion practiced at several points which were still bleeding, and the wound temporarily packed with gauze. In a few moments the tampon was removed and the cavity swabbed out with a solution of iodoform in ether and turpentine. The after treatment of the case consisted in liquid diet and the use of an antiseptic mouth wash. The patient was soon able to swallow without difficulty and to speak intelligibly. Since the operation she has gained over 30 pounds in weight.

CASE IV.—*Cancer of the Stomach.*

Mr. W., aged 44, gave the following history: Eighteen months before his admission to the hospital he began to suffer from indigestion and slowly to lose flesh and strength. Three months ago he discovered a small, hard, freely-movable lump in the upper part of his abdomen, which had been variously diagnosticated by different doctors as an aortic aneurism, a movable kidney, and a "growth in the bowels." His tongue was coated, his breath foul, and his bowels distended with gas. Food taken into the stomach would remain undigested for hours and then be vomited. His weight had been reduced from 160 to 112 pounds. There had never been pain, hematomesis or cachexia. An examination of the stomach contents showed an entire absence of hydrochloric acid, the presence of lactic acid, and Oppler-Boaz bacilli. His urine contained large quantities of indican.

A diagnosis of carcinoma of the pylorus was made. The patient was fully acquainted with nature of his trouble, and an operation advised as a desperate but only chance for relief. To this he consented.

Preparatory treatment was instituted for a few days and consisted in the restriction of diet to predigested nitrogeneous food, the regular and systematic lavage of the stomach and the administration of small and repeated doses of calomel to empty the bowels and produce relative intestinal antisepsis.

A five-inch median incision was made, and the pyloric end of the stomach and the duodenum delivered through the wound. Adhesions were slight, and the mesenteric and postperitoneal glands not enlarged. The malignant growth could be accurately outlined, and was found to begin in the pyloric valve and extend some three and a half to four inches in the walls of the stomach. An elastic constrictor, in the shape of a catheter, was tied around the duodenum two inches below the mass, and another around the stomach about the middle to control hemorrhage, and the omental attachments between these two provisional ligatures tied in sections and divided. The diseased portion of the stomach was then excised, care being taken to cut through apparently healthy tissue at least one inch from the neoplasm. The divided end of

the stomach was united from above downward with three rows of silk sutures, until only an opening was left at inferior angle equal in size to the lumen of the cut end of the doudenum. An anastomosis was then effected between the two by means of a Murphy button. The elastic constrictors were removed, and as no bleeding followed the toilet of the peritoneum was made and the abdominal incision closed without drainage. The patient re-acted well and made an uninterrupted convalescence. For the first three days he was fed with nutritive enemata, and his thirst re-relieved by high rectal injections of saline solution. On the fourth day he was given buttermilk by the mouth. His bowels were kept open from the first by mercurials and salines. The button was passed on the eleventh day, and solid food was permitted shortly afterwards. His tongue cleaned, his appetite became good, and he gained nineteen pounds in weight in the five weeks he remained in the hospital.

CASE V.—*Cancer of the Liver.*

Mrs. C., aged 60, had been a victim to indigestion and flatulency for years. She had also suffered with vague epigastric pain which had recently become more violent and paroxysmal. It began in the region of the gall-bladder and radiated to the back and right shoulder. Three months before her admission to the hospital she developed jaundice, which had slowly deepened and persisted without intermission.

When examined she was found greatly emaciated and decidedly septic. There was constant vomiting and diarrhea, but, though the discharge was greenish in color, chemical tests proved they contained no bile. The abdominal muscles over the liver were so rigid that little accurate information could be ascertained by palpatation. That a tumor of some sort was present was demonstrated by the force of aortic impulse transmitted to the surface of the body.

The patient's symptoms were evidently due to obstruction of the common duct, but a differential diagnosis between gall-stones and cancer could not be made. Despite the discouraging outlook, it was determined to open the abdomen and attempt to remove the obstruction to the duct if it was due to the impaction of a stone, or to provide another avenue for the escape of bile if it was due to a maligant growth.

A vertical incision was made parallel to the external border of the right rectus muscle, beginning at the costal cartilage and extending downwards three and a half or four inches. Hemorrhage was profuse, as is always the case in jaundice. When the peritoneal cavity was entered a tangled mass of adhesions was found. These were broken up sufficiently to expose the under surface of the liver. No calculi could be felt in the gall-bladder or bile ducts. The viscus was opened and efforts made to pass a probe through the ducts, but failed. It was decided that the obstruction was due to cancer and was irremedial.

As the natural channel for the bile could not be restored it was determined to establish a new route by forming an artificial opening between the gall-bladder and duodenum, and this was accomplished by making an anastomosis with a small

Murphy button. Gauze drainage was inserted and the abdominal wound closed. The patient reacted well, bile appeared in the stools on the third day and the button was passed on the fifteenth day. During the period the button was in position the diet was limited to liquids, but purgatives were given when indicated without hesitation. Convalescence was rapid, the jaundice disappeared, the patient gained strength and flesh, and was discharged from the hospital at the end of the fifth week.

CASE VI.—*Cancer of the Rectum.*

Mrs. S., aged 32, had suffered with rectal trouble for over two years. She complained of sensations of weight and heaviness in the pelvis, constant desire to go to stool, but inability to empty the bowel, great pain at the rectum and frequent discharges of pus, blood and mucous from the anus. Enemata caused agony and the bowels could only be moved by large doses of drastic purgatives.

A rectal examination showed the existence of a dense stricture three inches from the anus, and bi-manual palpation disclosed a large boggy mass immediately above it. Under cocaine anesthesia a small piece of tissue was cut from the lumen of the stricture and a microscopic examination confirmed the fear that the disease was malignant.

The trouble had advanced too far to be dealt with by Whitehead's method and the patient was too weak to be subjected to Kraske's operation, hence it was determined to do a left inguinal colostomy for temporary relief. A two and a half incision was made on the left side of the abdomen similar in direction and location to that usually employed on the right side for appendicitis. The cut edges of the parietal peritoneum were caught with artery forceps, pulled up and stitched to the cutaneous incision with a continuous silk suture. A loop of the sigmoid flexure of the colon was brought through the wound and its upper end gently pulled on until no more could be withdrawn, the lower end of the bowel being returned to the cavity as fast as the upper was exposed. This procedure located a point in the colon where an artificial opening could be established without danger of subsequent prolapse.

In order to fix the knuckle of gut securely in the wound, a glass rod, the size and length of an ordinary pencil, was passed beneath it through its mesentery and allowed to rest on the skin at right angles to the line of the incision. This not only suspended the colon, but made a sharp bend in its lumen, which turned the current of fecal matter to the artificial anus and prevented it from entering the lower segment of the bowel.

The surface of the abdominal incision, which, by the suturing previously described, had been covered by peritoneum, was now brought in close apposition with the bowel by one or two through and through silk worm gut sutures at both angles. The exposed bowel was protected by strips of rubber dam and the usual dressings applied. Three days later the bowel was opened by cutting away its anterior wall with scissors. No anesthetic was used, pain was slight, and bleeding easily controlled. There was the immediate escape of flattus and fluid feces, and the discharge continued profusely for sev-

eral days, showing the amount of retention that existed. The patient at once commenced to improve, and in two weeks was up in a rolling chair. At first she was greatly annoyed by her inability to control the feces, but her bowels soon became regular and she learned to know the hour when to expect their discharge. She has gained fifteen pounds in weight, and is now able to go to market and attend to her household duties.

CASE VII.—*Cancer of the Breast.*

Mrs. T., aged 48, mother of several children, came to the hospital on account of a small, but slowly-growing tumor, which she had accidently discovered in the upper and outer quardant of the breast. It had never given pain, and for that reason it was not believed to be malignant. An examination showed the affected breast slightly smaller and less pendulant than the opposite one. The nipple was not retracted, but the skin was dimpled at several points over the growth. The mass was the size of a small hen egg, not tender to pressure, firm in consistency, apparently not adherent to underlying structures, and freely movable in all directions, even when the pectoral muscle was rendered rigid by extreme abduction of the arm. Careful palpation of the axillary space failed to demonstrate enlargment of the lymphatic glands of that region. Despite the absence of many of the symptoms generally supposed to be necessary for the diagnosis of cancer an immediate operation was urged. It was deemed that the presence of a growing tumor in the breast of a woman over forty was sufficient to justify the removal of the organ. Delay until the diagnosis was clear would probably mean procrastination until the case was hopeless. The operation being agreed to, the axilla was carefully shaved and the patient prepared in the usual way. The woman was anesthetized, placed on the operating table, the arm abducted and held at the wrist by an assistant who manipulated it during the operation in a way to facilitate the work.

An elliptical incision, with the nipple as the centre, was made through the skin—one end being at the sternum and the other at the juncture of the anterior axillary fold with the chest wall. The lower segment was made first in order that it might not be obscured by the blood, which would have been the case had order had been reversed. A straight incision, some three inches long, was then made from the outer angle along the lower border of the pectoralis major muscle to expose the axillary space. The skin was then dissected back and the incision deepened until the fascia of the underlying muscle was exposed. The fascia was then cut through the line of incision being parallel, but external, to that of the skin. This made the elliptical incision through the fascia much larger than the elliptical incision through the skin.

The mass thus outlined was grasped with volsella forceps at the sternal end and rapidly freed from its attachment to the anterior chest wall, the fascia being removed with the breast. Bleeding was controlled with hemostats. When the axillary end was reached it was found that the glands of the axilla were enlarg-

ed and evidently infected. Rapid blunt dissection was made to expose the axillary vessels, and these being located, the space was cleared of fat and glands, the procedure being facilitated by traction on the detached breast with which they were still connected. The artery forceps were removed one by one and such points as bled were caught and tied with fine silk.

A small rubber drain was inserted at the axillary end of the wound, the edges of the incision brought together by interrupted silk worm gut sutures placed about two inches apart, and neat apposition of the skin secured by a continuous buttonhole suture of silk. A voluminous aseptic absorbent dressing was applied and the arm of the affected side confined with bandages to the chest wall. The drain was removed in forty-eight hours, the stitches taken out on the ninth day, the patient was able to leave the bed at the end of two weeks.

CASE VIII.—*Cancer of the Cervix.*

Mrs. P., aged 48, mother of two children, had ceased to menstruate over a year ago. For the past six months she had been troubled with leucorrhea, and occasionally the discharge had been tinged with blood. The odor at times was offensive. three months ago she had lost considerable blood, but had attributed it to re-establishment of menstrual function. She suffered no pain, but the bleeding continuing at irregular intervals, she consulted her physician, who advised her to go to a surgeon. On admission to the hospital she was examined. The cervix was found lacerated and the lips everted. On the exposed posterior wall of the canal and extending backwards to the vaginal junction was seen an erosion. It was friable, vascular, and bled when sponged with a bit of cotton. It had elevated indurated margins and the whole cervix felt hard and inelastic. There was no pelvic deposit or rigidity of the broad ligaments, and the uterus was freely movable. A small fragment of the tissue was removed from the growth, and on microscopic examination was fund to be carcinomatous. An operation of vaginal hysterectomy was advised and accepted.

The pubes and vulva were shaved. the vagina frequently irrigated with antiseptic solutions, and other preparatory measures instituted. The patient was placed on the table in the lithotomy position. The vagina was widely opened with Sims' speculum and lateral retractors. The cervix was caught with tenaculum forceps, drawn down, and its interior thoroughly cauterized with a Paquelin cautery. The cavity of the uterus was lightly packed with a gauze strip, and the cervical opening closed by sewing the anterior and posterior lips together with three heavy silk sutures, the ends being left long to act as tractors. After re-sterilizing the vagina, the cervix was pulled forward and a transverse incision made with scissors in the posterior vaginal fornix and Douglas' cul-de-sac opened. The cervix was then dragged backwards and a transverse incision made across the anterior fornix. The bladder was carefully separated from the anterior face of the cervix and the utero-vesical fold of the peritoneum opened. The mu-

cosa intervening between the ends of the anterior and posterior incision was then divided, care being taken not to injure the uterine artery. With a finger introduced into the peritoneal cavity through the posterior incision as a guide, the lower portion of the broad ligaments, including the uterine arteries on each side, were clamped with forceps and divided. The uterus was pulled still lower down, the finger hooked over the top of one of the broad ligaments and the upper part of the ligament with the ovarian artery clamped and divided. The fundus of the uterus was then delivered into the vagina and a fourth forceps applied to the other ovarian artery. The last attachment that held the uterus in the pelvis was then severed and the organ extracted. The opening left in the vault of the vagina was narrowed by several silk sutures and a small gauze drain introduced. The forceps were left in place for forty-eight hours. The drainage was removed at the end of the third day. The patient was shortly allowed to assume a semi-recumbent position in bed, and made an uneventful recovery.

CASE IX.—*Cancer of the Uterus.*

Mrs. D., aged 45, gave a history of bleeding, purulent discharge from the womb for several months, with constantly increasing loss of flesh and weight. Vaginal examination showed a large swollen cervix, free from ulceration. Bi-manual examination proved the uterus to be about the size of a child's head and the seat of fibro-myomatous growths. It was at first thought that the condition was due to a simple degenerative change, but dilatation of the os and inspection of the endomentrium disclosed a suspicious growth above the internal ring. A piece of tissue removed with a curette and examined under the microscope showed it to be carcinoma. As the uterus was too big to be removed by the vaginal route it was decided to take it out through a supra-pubic incision. The organ was first curetted and its cavity irrigated with a 50 per cent. solution of peroxide of hydrogen, followed by a flushing with a 1-4,000 solution of bi-chloride of mercury. The uterus was then packed with gauze and the cervix tightly sewed up. The abdomen was then opened. The ovarian arteries were tied on both sides, the broad ligament divided down to the juncture of the body of the uterus with the cervix, and then the uterine arteries ligated. A transverse circular incision was made through the peritoneum at the point of its reflection from the uterus to the bladder in front and the rectum behind. The uterus was pulled up, and the peritoneal cuff pushed down, until the vagina was reached—which was determined by palpation and percussion. A small opening was made into it in front and it was ligated in sections to prevent bleeding, and cut around the cervix, thus freeing the uterus. A gauze strip was inserted into the vagina from above and loosely packed in the bottom of the pelvis, and the abdominal incision closed. The drainage was removed at the end of the third day, the patient made an uneventful convalescence, and when last heard from was doing well.

CASE X.—*Cancer of the Penis.*

Mr. S., aged 51, stated that a year or more ago a small ulcer developed on his fore-skin, which was irritable, bled at slight provocation, became indurated and slowly spread, involving all adjacent structures. When examined the end of the penis was found about the size and shape of a door-knob, having lost all natural outlines and having been transformed into a cauliflower-like mass.

The growth was red, with patches of gray slough over it, and with deep clefts between its watery protrusions. The inguinal glands were perceptibly enlarged. The opening of the meatus was discovered with difficulty. There was no pain, but there was a horribly offensive odor. The patient was in good general health, and gave no history of venereal disease. His wife was living and free from uterine trouble. The diagnosis of cancer was so plain that a microscopic examination of tissue was deemed unnecessary, and an immediate operation advised. After shaving the pubes, and other suitable preparatory treatment, the patient was anesthetized and placed on the table. The skin at the base of the penis was transfixed by two steel pins, and an elastic constrictor wound tightly around the organ behind them. A broad rectangular cutaneous flap was cut from the dorsum of the organ, and a straight incision made through the skin on its under surface. The corpora cavernosa were then amputated close to the pubic bones. The corpus spongiosum, containing the urethra, was cut some half-inch longer. The urethra was then dissected out of it. After ligation of the main arteries of the part, the constrictor was removed and bleeding at minor points arrested. The pins were then withdrawn. The cutaneous flap now hung over the end of the stump like an apron. An opening was made in its centre, and the divided end of the urethra drawn through it. The canal was split to prevent subsequent contraction, and the two halves sutured. The edges of the flap were then fastened at two or three points, close approximation being avoided to give necessary drainage. After the completion of this part of the operation, attention was next directed to the inguinal glands. Both groins were laid open by a free incision over Poupart's ligament; the skin turned up and down, and the fat and glands of each side removed in one connected piece. Urine was drawn with a catheter for several days. Union occurred by first intention and the patient was discharged with perfect control over micturition.

President's Address.

BY I. N. UPSHUR, M. D., Richmond, Va.

Mr. Vice-President, and Fellows of the Tri-State Medical Association.

I give you most cordial greeting, and bid you welcome to this, our fourth annual meeting. I trust that we have all assembled here animated by an earnest purpose to labor for the development and progress of this Association, more diligently in the future than we have done in the past, increasing its prestige and usefulness, overcoming every obstacle and hindrance, and determined to

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demonstrate to the profession in our three States, at least, that it is an honor and privilege to be enrolled among the fellows. We must prove that it is not antagonistic to or incompatable with the welfare and usefulness of our State societies, but rather contributes to their strength and efficiency. At the last meeting of the State Medical Society of Virginia, a large number of the papers presented were from leading and enthusiastic fellows of this Association. It is well to cement fraternal relations with the members of our profession at home and within our borders, but it fosters useful emulation, broadens and matures a man to be brought into mental friction with our brethren in the Tri-State and National Associations; makes us feel more keenly the universal brotherhood of medical men, and a greater community of interests of every kind. No men should so consistently endeavor to illustrate in their daily lives that charity, which suffers long and is kind, in our dealings with each other, remembering ever that to err is human, and striving for that standard of emulation of who can best work and best agree. Let us, my brethren, grow together more closely; let us prove to the world that if doctors do differ, it is only in matters of scientific research and results. That in soul and spirit they are welded together in a noble emulation, in the discharge of noble and unselfish deeds, in the exhibition of a sublime moral courage, which dares face any self-sacrifice or danger, so that humanity be the gainer. Our lives before our fellow men, like the vibration of the gentle breezes over the chords of an eolian harp, giving out music sweet and low, yet when the hurricane blows in its strength and fury, there bursts forth a richer and grander symphony which thrills and entrances. So we in the common rounds, the daily duty, may diffuse good cheer and comfort to all with whom we come into contact; when trials and difficulties arise let the imprint of our lives on our fellow men be grand, elevating, sublime.

The medical profession fails to exert the influence, scientific, social and political, that it should do, because of lack of unity of purpose and action, emanating largely from an erroneous view of self-interest. One is startled to read the facts brought out in a recent editorial in the *Journal of the American Medical Association*, in which it is shown that two-thirds, at least, of the profession in the United States, are not members of any medical association. It is estimated that the number of physicians in the United States is from 100,000 to 120,000, and of these, 77,000 are not members of any medical organization. And of those who are members of societies, by far the larger part are apathetic and indifferent, and take no part, either scientific or otherwise, to further any interest of the profession. It goes into an analysis of the causes of this condition, and says, "the first rests with those who are not members; these are apathetic and indifferent, ignorant of the practical value of membership. The second is the want of medical societies in many localities. The third rests with medical societies themselves; they are not performing their full functions as organizations representing the medical body politic.

As educational or scientific bodies, the majority of them are not conducted for the best interests of their members." All this is "a revelation that accounts for the wretched condition that our profession is in as a body politic, and as a social factor in many ways. It is jealous, antagonistic, discordant, disorganized, powerless, without unanimity of thought or action on important questions—ethical, social or scientific. Without influence, socially, politically or in any other way."

No doubt one cause which has led up to this, is the low standard of medical education which has existed, and the many cheap and imcompetent small colleges which have existed throughout the country, offering inducements to improper and unfit men to enter the profession, whose only object after getting the degree is money-making, whether by fair means or foul; fostering superficiality of acquirement, and tending to chicanery and quackery. The desire to be prominent, inducing unethical and dishonorable advertising, and other questionable methods to obtain patronage, in many cases a practice which borders dangerously near the commission of crime. We should throw all of our influence to encourage and uphold a high standard of medical education, and exercise earnest and active opposition to those medical schools which fail to measure up fully to these requirements. I trust that in your wisdom you will take such action as will place our Association on a more stable basis, develop such methods as will add to its usefulness and attractiveness. Our experience in the past has demonstrated that we may well be proud of our transactions, and the fact that they have taken rank second to no other State or Tri-State Society, should fix for us a high standard in the future, and make us more ambitious to excel in the literature that we offer to the profession. A matter I consider of vital importance to the welfare of the society, is an earnest effort by every fellow to increase our membership, as well as an organized effort on the part of the society to this end. I would therefore recommend, if in your wisdom you approve, that a standing committee of five in each State be appointed by the President, whose duty it shall be by correspondence and such other means as they may deem best, to endeavor to add materially to the membership of the society. Much may be done by personal effort at the regular meetings of our State societies, emphasizing always the fact that this society is not in opposition to it, but anxious to be helpful to the State and local societies.

We cannot as a profession be too closely in touch, our interests are too important and our responsibility to the public too great, for us not to be in a position to exercise as strong an influence as possible for the welfare of suffering humanity and our own material advantage. The continual strain of physical exertion and mental anxiety which falls to the lot of the busy doctor gives him an uncertain tenure upon life—there can be no higher claim upon him than to so conduct his work that he fail not to provide for wife and children, who may at any time be deprived of his protection and care as the result of his unselfish devotion and care of his

patrons. It is not my desire to occupy too much valuable time allotted to the reading and discussion of papers, but I have thought it might be well, considering the strides being made in the development of every department of medicine, to discuss with you a topic, which my observation leads me to believe, is largely relegated to the side issue, as it were, and which, in its unassuming modesty, seems at least to attract less attention than some other department attended by dash in performance and brilliancy of results. I would make a plea for internal medicine, not that I would belittle or under-rate the brilliant achievements of modern surgery, which has added so marvelously to the prolongation and saving of human life, and the alleviation of many a human pang—but because this is so, I would earnestly present the claims of the less obtrusive sister science. Surgery in all of its departments, holding out as it does most certainly, the chances to our younger brothers of greater emolument and more brilliant reputation more quickly attained, because the work is such that its results are seen, magnified and appreciated more fully by the public. The tendency of all of this is to attract young men, many more of them, to the study and development of surgical science, than are to be found in the more sombre fields of internal medicine. And yet I dare assert, that no department of our science requires more earnest study, a more analytical mind, a more careful discrimination, a truer intuition, a more tender sympathy, than does the department of internal medicine.

The surgeon may run risks of blood infection in the performance of some operation, and his courage be put to trial on the battlefield, as he nobly does his duty in relieving the suffering of the men who have been almost done to death on some blazing crest, when defending their country's honor and liberty. But yet it is in the field of internal medicine, "when the pestilence that walketh in darkness, and the sickness that destroys at noonday," is all about and around them, that with a sublime and unflinching moral courage, the devotees to internal medicines, discharge nobly their mission, calmly, unselfishly ministering to the sick and dying, and by their devotion add lustre to the science of medicine, and inscribe high on the roll of undying fame, the names of those martyrs who die for their brother man. "Greater love hath no man than this, that a man lay down his life for his friends." In the field of investigation and progress, the man who follows this department of our science has as much to attract him as the surgeon. The young man of the present day too often turns to what he considers the most attractive field, but my brother, if you will delve in this one, you will find inexhaustible treasures, fascinating and absorbing. The evolution in pathology as developed by the microscope, the ever-widening knowledge of the causation of disease as unfolded by bacteriology, the broadening of resource by a truer insight into the physiological action of drugs and the potency for relief by a rational and intelligent exhibition of remedies and the application of a therapy truly scientific, yet practically efficient in effecting relief of suffering and the restoration of

health. This stimulates the earnest worker in the right direction and makes him turn his back on pretense, ignorance and superficiality, as represented by a servitude to the omnipresent proprietary preparations of the day, products of the ingenuity of brains, ignorant of physiology, pathology, or the rational therapy of cure in diesase. The advance in gastro-intestinal pathology and therapy, by careful investigation, and a widening resource in dealing with many affections which before defied our utmost skill, the more intelligent management and cure of those diseases responding to the serum treatment, the reduction of the mortality of typhoid fever, the advance in the knowledge of dietetics, and the increasing potency of hygiene in the prevention of disease, the ever-advancing knowledge and success in the treatment of diseases of the nervous system, all these appeal to us to turn our faces in a direction, ever more scientific and offering a broader, yes, an ever-widening field for usefulness to humanity.

You have done me the honor of elevating me to the responsible position of your presiding officer, an honor appreciated more highly than I can in words express to you. The welfare of the Association has been constantly in my mind, and excelsior, has been my motto, striving ever onward and upward, hoping to attain that goal which will place this Association in the first rank of medical scientific bodies of this country. To have served you in this position will ever be among the most cherished memories of my life, and when I return to the ranks, will, I trust, be to me a more earnest stimulus to greater endeavor in so worthy a cause than ever before.

In conclusion, I bid you God-speed in the work before you, and I trust that in this Association each section may do such good work as to excite the greater effort of every other.

A Few Abdominal Operations on Women.

By R. S. Martin, M. D., Stuart, Va., President of the Medical Society of Virginia.

Mr. President and Fellows:

At the request of Dr. Stuart McGuire, of Richmond, I beg to report a few abdominal cases in women, operated on during the last few years.

Before beginning this report, I wish to say that I am glad to be here. North Carolina is my native State. In 1885 I left her borders to try my fortune in Virginia, and while I love my adopted home—and Virginia has been good to me—there springs within my bosom a feeling of joy when I hear the name of the Old North State mentioned. God bless her; she holds the ashes of my father and forefathers, and so long as life lasts, unless my reason is dethroned, I will love her, cherish her memory and rejoice in her success.

Case I.

Mrs. B., age 42, married, mother of five children, came to Mothers' Home June 5th, 1901. About four years ago noticed enlargment in lower part of abdomen, which had gradually increased in size. Menses every two or three weeks, rather profuse. Bowels regular. Appetite poor. Presents the characteristic emaciation of ovarian cyst. Had

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been told by her family physician that all her trouble was due to her liver, and was treated accordingly, until Dr. Slate, of Stokes county, N. C., made the proper diagnosis of ovarian cyst. He had her sent to me at once for operation, which was performed June 17th, 1901.

Four and one-half gallons of fluid were removed from the sac. No adhesions. Operation very simple. Patient put to bed with no shock, and in good condition.

She did well, considering her emaciated condition, until June 28th, having very little fever, pulse not over 96 and temperature not over 100. June 28th, fever 101, pulse 108. In the afternoon removed stitches. Fever 102. From June 29th, to July 24th, she had more or less fever, sometimes running as high as 104 to 104½, but usually ranging from 100 to 102.

She had no special pain or symptoms which would aid in locating cause of fever. The following treatment was given: Sponge baths for temperature. Nutritious diet, strychnine hypodermically, 1-30 grain three times a day. P., D. & Co.'s Nuclein Solution, one drachm three times daily and when the temperature was highest. Antistreptococic serum, two doses.

She recovered and left the sanitarium August 9th.

The points of interest are (1) temperature beginning twelfth day, duration from June 28th to July 24th; (2) cause of fever never located. Treated as septic. Typhoid thought of, but no bowel symptoms. No marked results from drug treatment except strychnine, and probably Nuclien. Supporting patient and sponge-baths of alcohol did most good.

Case II.

Mrs. K., age 52, married, mother of five children. About three years ago noticed enlargment in lower part of abdomen. Menopause two years after. Since that time the growth has been more rapid, and for the last year it had been very rapid. Bowels constipated. Bladder gave a great deal of trouble from pressure. Operation performed June 12th, 1900. A large fibro myoma, upper portion being cystic, was removed by abdominal hysterectomy, the uterus being amputated at the internal os, and the stump covered in the usual way, with peritoneum. The operation was difficult, owing to many adhesions, and the thickness of the abdominal walls from excessive fat. She was profoundly shocked when removed from the operating table, soon reacted under appropriate treatment. She did well for about twelve days, when she had a chill and her temperature ran up to 103 and pulse 120.

After a few days with no improvement, she was put upon the table and the cause looked for. Examination made per vaginum of the stump. This was carefully dilated and a small curett was inserted making very gentle pressure. Suddenly I felt it give way, and on withdrawing the curett, the pus followed. The sac was thoroughly washed out with sterile water and hydrogen dioxide, and packed with gauze. This was done daily for awhile, and the lady was soon well enough to leave the sanitarium, and has since enjoyed good health.

The point of interest was the infec-

tion in this case ,through the vagina, and the immediate relief when thorough drainage was introduced.

CASE III.

Mrs. B., age 30, married, no children, has menorrhagia and metrorrhagia. Diagnosis, fibroids of the uterus. Operation performed March 25th, 1898. Several subperitoneal fibroids removed by enucleation, several interstitial were left in. The patient's condition would not permit of total hysterectomy. Ovaries and tubes removed. She made good recovery. I examined her two years after the operation and could not find any tumors.

CASE IV.

Mrs. K., age 52, married, no children. Five years ago noticed she was getting larger in abdominal cavity. Diagnosis, ovarian cyst. Has been aspirated twice, last time getting no fluid. Operation for removal of cyst performed February 1st, 1898. Abdominal wall very thick from adipose tissue. On reaching cyst a large hollow trocar was introduced when the sac broke into a number of small pieces like it was a piece of glass or ice, emptying contents, which were thick and ropy, into abdominal cavity. The pedicle was found, ligated and the remaining part of sac removed, and then began a hunt for the numerous pieces of the sac, and getting the abdominal cavity free from the contents of the cyst. This was tedious, and prolonged the operation. A gauze drain was left in, but removed in twenty-four hours. Case did not do well. Was difficult to get bowels to move, I think due to the bowels being exposed so long, and partly paralyzed. On the morning of the sixth day the outlook was gloomy, pulse quick and feeble, respiration bad, and tympanitic bowels, but temperature good. All efforts to move the bowels had proven useless. At 4.30 p. m., on the sixth day the bowels, by high enema, moved, when all the alarming symptoms disappeared and the patient made a very rapid recovery.

CASE V.

Mrs. B., age 57, married, no children, came to Mothers' Home in August, 1901. Noticed enlargment in left side about two and a half years ago. In 1888 had an ovarian cyst removed from right side by the late Dr. Hunter McGuire. She had been aspirated four times in the last eighteen months. Diagnosis was made of ovarian cyst. Operation was postponed owing to her feeble condition, until November 29th, 1901. The incision was made a little to the right of the old scar. The fluid from the sac was removed by aspiration. Part of the sac was filled with papillomas, cauliflower-shaped growths. Owing to very firm adhesions, as much as possible of the sac, including the papillomatous growths, was removed. The remaining part was stitched into the abdominal incision, irrigated and packed with iodoform gauze. The patient did well, temperature never going over 100. Gauze was changed about every third day, and cavity irrigated with cherry red solution of iodine and normal saline solution. She left the Home January 17th, 1902, with the sac almost healed.

CASE VI.

Miss H., single, age 27. Has retro-flexion of the uterus, with adhesions. Operation of ventro-fixation performed September 5th, 1899.

Temperature on the evening of the second day, 101 1-5. This did not subside with the usual move of the bowels. The temperature continued, never running higher than 101½, until about the eighth day, when the stitches were examined, and part removed, having found a stitch hole abscess which responded very rapidly to drainage and cleansing with hydrogen dioxide. She made a very rapid recovery and has since remained perfectly well.

CASE VII.

Miss H., age 23, single. Been complaining for three years. Menses regular, but very painful. Has leuchorrhea and constipated. Noticed enlargment in abdomen for the last three years. Diagnosis, ovarian cyst. Operation performed March 3d, 1899. Adhesions so numerous that the cyst had to be enucleated and cavity packed with iodoform gauze to prevent hemorrhage. In forty-eight hours the gauze was removed and abdominal cavity closed. Patient did not do well. Temperature ranged from 100 to 102 and 104. On the twelfth day an abscess was discovered pointing about midway of the incision. This was carefully opened and irrigated with hydrogen dioxide and packed with gauze, and from that day on the case progressed nicely and made rapid recovery.

CASE VIII.

Mrs. P., age 26, married, three children. Suffers from profuse menorrhagia. Has retro-flexion with adhesion. Both ovaries enlarged, prolapsed and adherent. Patient a great sufferer from constant pain, bearing down sensations, etc. Operation performed January 31st, 1902. Ventro-fixation of the uterus. Right ovary and greater part of left one removed, both cystic. Adhesions numerous. Patient was put to bed in a fairly good condition. In about twenty-four hours I noticed the pulse was not good, gradually going up until it reached 150, and feeble. Facial expression bad. Temperature normal in the mouth, by rectum, 101. I diagnosed internal hemorrhage. Gave large doses of strychnia and saline infusion. In the course of six or eight hours I noticed some improvement, and in twenty-four hours a decided change for the better. Patient did fairly well, but had daily some temperature, 100 to 101. Pulse 90 to 110, until the ninth day, when the temperature increased and pulse became more frequent. On vaginal examination, I found a soft, fluctuating mass in the cul-de-sac. This was opened and drained, a dark, bloody fluid escaping. The cavity was irrigated and packed with gauze. The cavity is open and daily irrigated with normal saline and dioxide hydrogen. I see no reason why she should not soon be well.

CASE IX.

During the summer of 1900, a negro man weighing 250 pounds came to me for treatment for strangulated hernia. He stated that he had always had hernia, and on the day previous to his visit, while lifting a heavy weight, he felt something slip, and on examination found his usual hernia. He failed after repeated efforts to return it. On examination I found a mass half as large as your fist lying in the inguinal canal. He had no vomiting, but little pain, and

bowels had moved. I made taxis without chloroform with no result.

Giving him chloroform and failing to return the mass, I cut down up the mass and found omental hernia. The opening was enlarged and mass returned and the patient made a good recovery.

The points of interest in his case were the fact that the man had no symptoms. Came twenty miles on the train, walked from the depot to my place, one-fourth of a mile, but had little pain, and bowels had moved well. The only indication for an operation was the non-reducible mass.

You will notice that I have reported only abdominal cases that had complications during their convalescence. am happy to say that most of my cases have had no complications.

Suggestions on the Treatment of Inflammatory Conditions of the Air-Passages.

By A. L. Leatherman, M. D., Indianapolis, Ind.

Owing to the atmospheric changes which are very sudden, the people of the middle west are particularly liable to affections of the respiratory tract. The effect of these climatic variations is exaggerated and greatly enhanced by conditions peculiar to the natural gas belt of Indiana. The continued dry heat causes the evaporation of every particle of moisture in the living rooms. Fires are allowed to burn night and day in most homes; and especially at night, when the natural gas pressure comes on with added force, the mucous membrane of the respiratory tract is continuously subjected to a high temperature, which causes it to become dry and extensively congested, as I have frequently experienced. Of course, any over-heated structure will produce the same result, and we have in consequence a membrane predisposed to inflammatory conditions. As soon as the highly sensitive mucous membrane comes in contact with the raw atmosphere the result is an acute congestion of the nasopharyngeal, laryngeal, and bronchial tract. The sudden changes from hot rooms to cold damp atmosphere and from warm winds to intensely cold winds the next day, are quite common in connection with other predisposing factors—living in overheated rooms, bad ventilation—and promote a condition pregnant with danger to the respiratory tract. The result is rhinitis, laryngitis, bronchitis, pneumonitis, pleurisy and phthisis, to say nothing of lesser ailments.

One of the diseases which flourishes here, belonging to this same class, is epidemic influenza, or la grippe. This seems to have become epidemic in this part of the country so that every winter and spring more or less well marked cases of influenza are seen. There is a tendency on the part of the laity, and, in fact, of some physicians, to class all colds accompanied by aches and pains as grip, and perhaps other conditions more remote. The cases I shall cite are only those which in my judgment were epidemic influenza. They have all the characteristic symptoms well marked—severe backache, pains in the extremities, anorexia, fever (101 degrees to 103 degrees or higher), nausea, occasionally vomiting, radiating pains up and down from the

knee joints—all these accompanied by the inflammation of one or more of the serous membranes or cavities. During the later stages the depression of the mental faculties and prostration of the physical organization with slow recovery indicate severe poisoning of the system. It is of this class of cases I desire to speak, especially of the causes, complications and sequelae, and their treatment.

Influenza has made its appearance at various times and in numerous places, always following avenues of trade and commerce, and along lines followed by public travel. There must also be present other causes, sudden atmospheric changes, exposure, causing lowering of the vital forces; in fact, any condition that interferes with the natural resisting powers of the organism. Influenza is especially virulent in cold damp weather accompanying the sudden breaking up of a period of severe cold weather, or when the snow is melting suddenly or being followed by rain, causing the ground to be covered with slush and the atmosphere to be peculiarly cold, raw and heavy. At such times people are apt to have wet feet and go about more or less exposed, on account of the sudden and unanticipated changes. The whole organism is chilled, the vital forces all reduced, the resisting power is diminished, and the contagium of influenza finds a soil more or less prepared for its reception and development. Then follows from three to ten days of malaise when all duties are a burden. Then pain develops in the spine and knees, and the patient, thinking it a cold, begins dosing with quinine and whiskey, or sends to his druggist for a box of some nostrum, with the result that instead of improvement, the head starts aching, the patient becomes more prostrated, the quinine increasing the headache and the congestion of the serous membranes. It has been my experience and that of other practitioners that in genuine influenza quinine is contraindicated.

The aims of the treatment are the augmentation of the vital forces, relief of pain and the prevention, if possible, of serious complications and sequelae. Alcohol in some form, either whiskey, brandy, or some stimulating drink, seems to meet the first requirement admirably, unless contraindicated. In the latter case digitalis or strophanthus can be substituted. The stimulation should be sufficient to overcome the feelings of lassitude and depression, and to keep the heart in as perfect working order as possible.

To meet the other requirement, there is one preparation that in my hands has given better results than any other. Heroin, either in combination with other drugs or alone has proved of great service to me in my practice. Administered at the onset of the disease, it allays the terrible backache and relieves the cough which in many cases is very distressing. Heroin hastens the resolution of the inflammation of the bronchial mucous membrane and if judiciously administered with other drugs, an attack of influenza can be cut short several days, and the pain and suffering almost entirely eliminated. Sleep and rest are possible when the vital energies are conserved to combat other complications. Combined with terpin hydrate, heroin becomes

one of the most efficient remedies at our command.

In cases of pneumonia, bronchitis, croup, laryngitis, and all that class, the sedative and expectorant effects of heroin are especially well marked. What I have just said should not be construed as advocating heroin as a specific for influenza, but as a useful remedy in meeting the troublesome indications of a serious disease, which terminates fatally with alarming frequency.

Heroin is free from the depressing and nauseating effects of the other opium preparations to a great extent, while it has also the equal advantage of being administered by mouth, subcutaneously or by rectum. If administered in combination with terpin hydrate we obtain the sedative effect of heroin on the central nervous system, the relief of cough and pain, together with the expectorant effect of terpin hydrate on the bronchial mucous membrane and its diuretic action, promoting the elimination of poisons through the uro-poietic system. The after-effects of either are practically nil.

My varied experience, with the beneficial effects of heroin is well illustrated by a few cases selected from my record, which are of sufficient variety to further explain what I have just said.

Case 1. M. G., boy, aged 4, was brought to me on September 20, 1900. Examination showed enlarged tonsils with deeply congested mucous membrane of the nose, pharynx, larynx, and bronchi. Mucous rales were present over the central portion of the chest. Breathing was almost entirely through the mouth. The tonsils were enormous, filling the entire space between the tongue and pillars of the fauces and the posterior wall of the pharynx. A time was appointed for the removal of the tonsils, but before this he had a severe attack of croup (which, I was informed, was a common occurrence), causing such stridulous breathing that he could be distinctly heard from the street. His cough was hoarse and rasping; he could not talk above a whisper. Cold compresses were placed on the larynx. A spray of equal parts of glyco-thymoline and lime water was used by nose and mouth. The following was given internally:

Heroin hydrochloride. ...¼ grain.
Terpin hydrate .....14 grains.
Syr. ipecac ... .2 drachms.
Glycerine..... .....1 ounce.
Elixir simplex q. s. ad.... 2 ounces.
Sig. One drachm every hour until relieved.

The first dose was repeated in fifteen minutes, and after a few doses the spasm of the glottis ceased. After two hours he fell asleep, resting well all night. The day following the tonsils were removed. The medicine was continued with doses diminished one-half, the child making a good recovery. He has had but one slight relapse, whereas before, he scarcely passed a night without an attack of croup. He was kept on this medicine for three weeks, and has since had no attack. His father, who by the way, is a druggist, informs me that this prescription was the first ever given him that seemed to have the slightest effect.

Case 2. Mr. W. G., aged 44, sent for me January 16, 1901. History: He has a bad heart from excessive smoking; his pulse intermits every third and fifth beat, and occasionally

he has severe attacks of palpitation that he fears will end fatally. This is his ordinary state. When I examined him I found his pulse remitting every third, fifth and seventh beat, the rhythm being also badly affected; counting the skipped beats, it was 115 per minute. His temperature was 103.3 degrees; respiration 30. His tongue was furred, brownish in color, and his breath foul. He was constipated. There was an intense frontal headache, and pain in the back of the head and radiating downward to the lumbar region where the pain was intense. He described it as a "terriffic grinding pain." He was very much prostrated and looked like a very sick man. He had stopped the use of tobacco three months previous at my suggestion. He was given tablets of aloin, calomel and podophyllin, of each 1-10 grain, followed in a few hours by a saline cathartic. This was followed by tablets of heroin hydrochloride, 1-12 grain, every three hours. The next morning his temperature was 101.5 degrees, pulse 85, still irregular, respiration 26. He had had six copious stools. He was then placed on the following:

Heroin hydrochloride.....½ grain.
Terpin hydrate.....10 grains.
Tincture digitalis.....2 drachms.
Tincture strophantus....2 drachms.
Aqua q. s. .....2 ounces.
Sig. One drachm every two hours.

This relieved the pain in his head, back and extremities in about six hours. The treatment was continued for five days with little variation. By the end of the second day expectoration was free, the depressed feeling in the chest gone, and he was rapidly recovering. At the end of five days the time between doses was increased to four hours, and the medicine alternated with a half-ounce of whiskey, followed by a cup of hot water. He recovered rapidly, and was able to be at his place of business in ten days. He is taking a tonic of iron and arsenious acid, as has illness left him pale and emaciated.

Case 3. F. M., boy, aged 18 months, small, with white hair, large blue eyes and a skin like the whitest transparent wax. He became ill September 20th, and gradually grew worse until September 26th, when I was called. His temperature was 105 degrees, pulse 143, and respiration 36. The pulse was full and bounding, the face flushed and the skin cyanotic. His cough was dry, and each paroxysm was followed by a cry of pain, and the child's face indicating intense suffering. Physical examination showed congestion of the right lung, broncho-pneumonia in the whole of the upper part of the left lung, and lobar pneumonia of the lower lobe with complete consolidation. Fortunately the child was still nourished at the breast. A pneumonia jacket was fitted to the chest, the back being covered about one-quarter of an inch thick with antiphlogistine and the front of the body from the neck to the umbilicus with a 20 per cent. ichthyol in glycerine solution. A saline laxative was given by the mouth and a copious injection per rectum. This was followed by:

Elixir heroin and terpin hydrate .....1 drachm.
Syrup tolutan.....2 drachms.
Syrup ipecacuanha.....2 drachms.
Spiritus frumenti.....1 ounce.
Elixir simplex q. s. a d...3 ounces.
Sig. A teaspoonful every two hours in a very small cup of hot water.

This treatment was continued with slight modification for six days when resolution took place. After the first night, the child seemed to suffer no pain, was perfectly conscious, would follow every one with his eyes, and occasionally would play, although very ill. The mucous came up readily, the cough became easy, and the little patient seemed as comfortable as one could be with such an ailment as pneumonia. He improved rapidly after the sixth day, and was discharged October 7, 1900, with nothing to show his illness but pallor. He has since regained his former vitality, although as I stated at first, he is naturally a frail child.

Case 4. Mrs. F. L. B., aged 28, became ill January 19, 1900. Respiration 37, tongue dry, painful hacking cough with brick-dust stained sputa. Excessive pain was present in the region of the left mammary line above the left breast. Breathing was short and very painful. Physical examination showed dullness over the whole lower lobe of the left lung with considerable congestion of the superior lobe. The right lung was not involved at this time, although a similar condition existed in this lung in the summer of 1894 and the early spring of 1896. This is an excessively nervous patient, who cannot take morphine, or, in fact, any opium preparation, belladonna, valerian; they all set her wild and render her thoroughly sleepless. Neither can medicines be administered by the mouth because of occurrence of excessive and persistent vomiting. A pneumonia jacket of oil silk lined with fleece wool and cheese cloth was fitted to her, and the back covered with a coating of antiphlogistine, while to the front from the pubes to the clavicle a 50 per cent. ichthyol solution in glycerine was applied. The reason for applying the solution so low down was on account of the development of a severe pain in the left hypochondriac region, which continued for 20 hours. Hot brandy and water was given by the mouth and all other drugs by the rectum. The following suppository was used:

Heroin hydrochloride.....1 grain.
Strychnine sulphate.....½ grain.
Chloral hydrate.....½ drachm.
Cocoa butter q. s.

Ft. in suppositories No. XV.

Sig. One by the rectum every three hours.

She was put on liquid diet, milk, eggs, broth, etc. At my next visit her temperature was 102.5 degrees; pulse 103; respiration 27. No pain was complained of and the patient had had a good night with three hours sleep. This condition continued with but little change for six days, when resolution took place, and the patient recovered rapidly. In order to appreciate the effect of this treatment is necessary to compare the course of this attack with previous ones in the same patient. In her previous illness, morphine, opium, codein, camphor, opii deodorata and drugs of that class had caused vomiting, loss of appetite and strength, and a distressing train of nervous phenomena. In her present attack there was no nausea or vomiting, and only occasionally slight anorexia. The patient and family have complimented me concerning the improvement in the treatment of this attack over former ones. Yet the only change was in the substitution of heroin for other mor-

phine and opium preparations. This patient made a good recovery and is now about her family duties.

Case 5. Miss K. A., aged 24, was brought to me suffering with pulmonary tuberculosis. The upper lobes of both lungs had been destroyed, but singularly, she had no hemorrhages. She was suffering from anorexia, nausea and sleeplessness, due to the fact that as soon as she lay down or ate something she began coughing. She was suffering from the effects of want of rest and food, and was greatly prostrated. The following suppository was prescribed:

Heroin hydrochloride.....2 grains.
Potassum bromide .....1 drachm.
Quinine Sulphate ....1 drachm.
Cocoa butter q. s.
Ft. suppositories No. XXIV.
Sig One every four hours until relieved (or oftener if necessary).

She was also given ten minims of tincture of iron for the night sweats. Her cough became much relieved, and she was able to sleep with a greater degree of comfort than she had for months. Food was retained, and she continued very comfortably for nine months, when the end came quietly.

I recall this case to show how even the last days of so distressing a condition as this can be robbed of its terrors. I had previously tried all kinds of preparations in this case, but with no effect until I used heroin.

Case 6. Miss N. M., aged 15, a small anemic girl. Two sisters, several uncles and aunts and other relatives have died of tuberculosis, and a younger sister has a tubercular inflammation of the spine. Miss M. has had a slight cough and all the physical signs of acute miliary tuberculosis. The financial circumstances of the family are such that treatment away from home is out of the question. I have put her on cod liver oil, iron, and forced feeding, and directed her to take as much outdoor exercise as possible. For the cough I gave her:

Heroin hydrochloride....3 grains.
Essence of pepsin.....1 ounce.
Terpin hydrate.....1 drachm.
Elixir Simplex q. s. ad...4 ounces.
Sig. One drachm a half hour before meals.

This quiets the reflexes so that she does not cough immediately after eating. Formerly she vomited the undigested meal during a paroxysm of coughing after eating. The result is flattering. This treatment has been followed for nine months. The mucous is readily expectorated, sleep is obtained, and the patient has gained nineteen pounds. She is still under treatment.

Case 7. Mr. W. G., aged 47, came to me with this history: He had been off from work two weeks with pains in his back, head, and extremities. He had high fever, cough, and a profuse expectoration of a greenish tenacious character. He sought relief from an intense angina pectoris which had developed the night previous—the sixteenth day of his illness. His pulse was 97, full and soft; temperature 103 degrees, respiration 24. His eyes were bloodshot; his skin congested. He was suffering from acute congestion of both lungs. His bowels were constipated, urine high colored, and burning during micturition. I gave him tablets of heroin hydrochloride, grain 1-12, every two hours until the pain began to be easier; then every

three hours unless sleeping. He also had a saline cathartic. He came to the office the next morning, reporting that he had slept fairly well; his cough was easier, his pain gone, except an occasional lancinating pain in the region of the heart. He was now given a thorough saline cathartic to be followed by this prescription:

Heroin hydrochloride....3 grains.
Terpin hydrate.....1 drachm.
Syrupus rhei..... .....½ ounce.
Syrupus tolutani.....2 drachms.
Glycerine..... .....1 ounce.
Elixir simplex q. s. ad...3 ounces.
Sig. One drachm four times a day.

This was followed by rapid improvement, allowing him to return to his work in five days. He is still taking a tonic, and rapidly regaining his strength.

These cases will give a clear idea of the class in which I think heroin is particularly adapted, and there is sufficient variety as to age, vitality, temperament, and different conditions of living to afford a clear conception of its merits in the practice of medicine.

In all cases of inflammation and irritation of the bronchial mucous membrane or of any serous membrane, heroin acts as a sedative and bronchial stimulant, relieving cough and pain and hastening resolution. The disturbances of the stomach are practically nil, and the depressing effects, if at all present, are slight. In pneumonia it relieves the cough, makes respiration easier and fuller, does not disturb the digestion, and produces sleep. The cases cited are simply some from a large number, any others of which would serve equally well to illustrate what I have tried to show, namely, the therapeutic action of heroin; and, on the ground of my observations, I heartily endorse its use in this class of patients to my fellow practitioners.

The Curability of Syphilis; Gottheil.

(Author's Abstract.)

Speaking of the curability of syphilis in the symposium upon that disease in the October number of the *International Medical Magazine*, William S. Gottheil, of New York, takes exception to the opinion of its practical incurability which is prevalent in certain quarters. Every day experience shows that the great majority of cases are cured in every practical sense, the occasional late relapses and accidents to the contrary notwithstanding. He concludes:

1. Syphilis is a curable disease, and may even, with restrictions, be called a self limited one.

2. Whilst cure in a given case cannot be affirmed with scientific accuracy, the chances of its being the fact after a certain time under proper treatment are so great that it may be properly claimed to have been affected.

3. Practically, a patient who has been properly treated throughout the active stages of the disease, and who has had no manifestations of its persistance for several years thereafter, may be regarded as cured, and may be told so.

for refusing to pay him, as the county board has undoubtedly the right to appoint, and to continue his employment as long as services were needed in the treatment of the disease. It was not denied that he abandoned all his business, and stayed during all the period of his appointment at the pesthouse, and was at all times able, ready and willing to discharge the duties for which he had been employed.

Declaration Against Illiteracy—Address to the People of North Carolina, by Conference of Educators, Held in the Governor's Office in Raleigh, February 13th, 1902—The Names of the Singers.

Profoundly convinced of the prophetic wisdom of the declaration of the Fathers, made at Halifax in 1776, that "Religion, morality, and knowledge being necessary to good government, schools and the means of education shall forever be encouraged"; and cognizant of the full meaning of that recent constitutional enactment which debars from the privilege of suffrage, after 1908, all persons who cannot read and write; and relying on the patriotism and foresight of North Carolinians to deal with a great question which vitally concerns the material and social welfare of themselves and their posterity, we, in an educational conference assembled in the city of Raleigh, this February 13, 1902, are moved to make the following declaration of educational facts and principles:

1. To-day, more fully than at any other time in our past history, do North Carolinians recognize the overshadowing necessity of universal education in the solution of those problems which a free government must solve in perpetrating its existence.

2. No free government has ever found any adequate means of universal education except in free public schools, open to all, supported by the taxes of all its citizens where every child, regardless of condition in life or circumstance of fortune, may receive that opportunity for training into a social service which the constitutions of this and other great States and the age demand.

3. We realize that our State has reached the constitutional limit of taxation for the rural schools, that she has made extra appropriations to lengthen the term of these schools to 80 days in the year. We realize, too, that the four months' term now provided is inadequate, for the reason that more than 20,000,000 children of school age in the United States outside of North Carolina are now provided an average of 145 days of school out of every 365; that the teachers of these children are paid an average salary of $48 per month, while the teachers of the children of North Carolina are paid hardly $25 per month, thus securing for all the children of our sister States more efficient training for the duties of life. And we realize that, according to the latest census report and the report of the U. S. Commissioner of Education, for every man, woman and child in its population, the country at large is spending $2.83 for the education of its children, while North Carolina is spending barely 67 cents; that the country at large is spending on an average of $20.29 for every pupil enrolled in its public schools, while North Carolina is spending only $3

or $4, the smallest amount expended by any State in the Union. And still further do we realize that the average amount spent for education of every child of school age in the United States is approximately $9.50, while North Carolina is spending $1.78.

These facts should arouse our pride and our patriotism, and lead us to enquire whether the future will not hold this generation responsible for the perpetuation of conditions that have resulted in the multiplicity of small school districts, inferior school houses, poorly paid teachers, and necessarily poor teachings, that have resulted in twenty white illiterates out of every 100 white population over ten years of age; in generally poor and poorly paid supervision of the expenditure of our meagre school funds and of the teachings done in our schools; and, finally, in that educational indifference which is the chief cause of the small average daily attendance of about 50 pupils out of every 100 enrolled in our public schools.

We believe the future will hold us responsible for the perpetration of these unfavorable conditions, and, therefore, we conceive it to be the patriotic, moral and religious duty of this generation of North Carolinians to set about in earnest to find the means by which all our children can receive that education which will give them equal opportunities with the children of other sections of our common country.

4. Viewing our educational problems and conditions in the light of educational history and experience, we declare it to be our firm conviction that the next step forward for North Carolina, in education, is to provide more money for her country public schools, making possible the consolidation of small school districts, the professional teacher, and skilled supervision of the expenditure of all school funds and of the teaching done in the schools.

The history of the adoption of the principle of local self help by our 35 graded school towns and cities must surely be an inspiratoin and an example to every village and rural community in North Carolina. Those towns and cities have adopted the only means at hand for the adequate education of their children. In adopting this principle, local taxation, they secured: first, adequate school funds; second, competent supervision; third, skilled teachers. Lacking any one of this educational trinity no community has ever yet succeeded in establishing the means of complete education for its children.

Those 35 towns and cities within our borders have followed the lead of other sections of the United States in adopting first the means of education, local taxation. The fact that 69 per cent. of the total school fund of this Union is now raised by local taxes, while North Carolina raises only 14 per cent. of her funds by that means, and lags behind all her sister States in every phase of public education, has both its lesson and its warning.

5. Remembering that in the last year nearly thirty communities in North Carolina, some of them distinctly rural, have adopted the principle of local taxation for schools, we think this time most auspicious to urge a general movement of all our educational forces in that direction, and, therefore, we appeal to

all patriotic North Carolinians, men and women, who love their State, and especially that part of their State which is worth more than all its timber, lands, mines, and manufacturing plants, to band themselves together under the leadership of our "Educational Governor" and the State Superintendent of Public Instruction, aided by the Southern Educational Board, to carry forward the work of local taxation and better schools, to the end that every child within our borders may have the opportunity to fit himself for the duties of citizenship and social service.

And, finally, heartily believing in the Christlikeness of this work of bringing universal education to all the children of North Carolina, we confidently rely on the full co-operation of all the churches of the State, whose work is so near the hearts of all the people, and, therefore appeal to the pulpit to inculcate the supreme duty of universal education.

Charles B. Aycock, Governor of North Carolina; T. F. Toon, Superintendent of Public Instruction; John Duckett; Charles D. McIver, President State Normal and Industrial College; F. P. Venable, President University of North Carolina; George T. Winston, President College of Agriculture and Mechanic Arts; Charles E. Taylor, President Wake Forest College; Edwin Mims, Trinity College; Henry Louis Smith, President Davidson College; Charles H. Mebane, President Catawba College; J. O. Atkinson, Elon College; T. D. Bratton, President St. Mary's College; R. T. Vann, President Baptist Female University; L. L. Hobbs, President Guilford College; C. G. Vardell, President Red Springs Seminary; J. D. Carlyle, Wake Forest College; J. L. Kesler, Baptist Female University; J. Y. Joyner, The State Normal and Industrial College; D. H. Hill, College of Agriculture and Mechanic Arts; L. W. Crawford, Jr., Rutherford College; J. I. Foust, The State Normal and Industrial College; M. C. S. Noble, University of North Carolina; Henry Jerome Stockard, Peace Institute; F. P. Hobgood, President of Oxford Seminary; Robert Bingham, Bingham School; J. A. Holt, Oak Ridge Institute; Hugh Morson, Raleigh Male Academy; D. Mott Thompson, Superintendent Statesville Public Schools; C. L. Coon, Superintendent Salisbury Public Schools; E. P. Moses, Superintendent Raleigh Public Schools; R. J. Tighe, Superintendent Asheville Public Schools; T. R. Foust, Superintendent Goldsboro Public Schools; E. P. Mangum, Superintendent Wilson Public Schools; E. C. Brooks, Superintendent Monroe Public Schools; Alexander Graham, Superintendent Charlotte Public Schools; Frank H. Curtis, Superintendent Burlington Public Schools; Harry Howell, Superintendent Washingington Public Schools; W. D. Carmichael, Durham Public Schools; W. S. Long, County Superintendent of Alamance; J. A. Anthony, County Superintendent of Cleveland; J. A. Butler, County Superintendent of Iredell; J. E. Ray, Superintendent of the School for the Deaf, Dumb and Blind; E. McK. Goodwin, Superintendent of the School for the Deaf and Dumb.

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Capsicum .....1-10 gr.
Ext. Nuc. Vom. .....1-8 gr.

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THERAPEUTIC HINTS.

For Influenza.

The *Journal Medical de Bruxelles* for January 30th quotes the following formulæ from the *Monde Medical:*

For disinfection of the ears:

℞ Glycerine .....30 parts;
Van Swieten's solution (Fr.Cod.) 15 parts;
M.

A few drops to be instilled into the ear three times daily.

[Liqueur van Swieten consists of corrosive sublimate, 1 part, in alcohol, 100 parts, and water 900 parts.]

For disinfection of the nose:

℞ Menthol.....3 grains;
Liquid petrolatum....½ an ounce.
M.

A few drops to be instilled into the nostrils three times daily.

For disinfection of the throat:

℞ Alcohol.....1½ ounces;
Resorcin.....45 grains;
Salol.....30 grains;
Water enough to make.. 1 quart;
M. To be used frequently as a gargle.

Or:

℞ Salicylic acid.....15 grains;
Spirit of peppermint, enough to dissolve;
Water.....1 quart.
M.

For disinfection of the room:

℞ Thymic acid, Carbolic acid, Salicylic acid. } of each .75 grains;
Menthol.....30 grains;
Alcohol.....8 ounces;
Tincture of eucalyptus..75 mimims.
M.

From two to four tablespoonfuls, in 16 ounces of water, to be evaporated in the sick room.

To Combat Collapse in Pneumonia.

Dr. Duleau (*Journal de Medicine interne*, February 15th) uses injections as follows:

℞ Strychnine sulphate $\frac{1}{100}$ of a grain;
Distilled water .....150 minims;
M. Three injections, of about 20 drops each, daily.

Where the tendency to collapse is not great, he recommends the following:

℞ Extract of cinchona....45 grains;
Tincture of cinnamon..75 minims;
Ammonium acetate ....150 grains;
Syrup of orange peel, Brandy, } of each 3 ozs;
Melissa water, to.....8 "
M. A tablespoonful every hour.—*New York Medical Journal.*

Cracked Nipples.

The following is suggested by the *Montreal medical* in treatment of cracked nipples:

℞ Gutta percha.....gr. xx
Spts. chloroform q. s. to dissolve.
M. Sig.: Apply after each nursing; or:

The following formula are very frequently employed in healing fissures of the nipples:

℞ Tinct. benzioni com....m. xv | 1
Olei olivæ.....ʒ ii 7 | 50
Lani.....ʒ vi 22 | 50
M. Sig.: Apply after each nursing, or:

℞ Ichthyol.....ʒ vi 3 | 75
Ol. eucalypti.....m. v | 30
Lani.....ʒ v 18 | 75

M. Sig.: Apply locally after nursing and wash before nursing again.—*Journal A. M. A.*

The Disease, the Patient, or the Remedy?

Cod-liver oil still remains incomparably the most efficient remedy in prolonging the lives of the victims of phthisis pulmonalis. In scrofula, strumous caries, and chronic arthritis, its powers are often signally displayed.

ALFRED STILLÉ, M.D., LL. D.,
Prof. Emer. of Theory and Practice of Med. in University of Pennsylvania.

Has this experience been yours, Doctor? If not, why not? The specific pathogenesis of the disease is essentially constant. The human system is affected in a manner sufficiently uniform to justify us in ignoring the individual personality. What, then, is the reason for the variation in therapeutic results? Why do some enjoy success, and others suffer failure? Is not the *form* of medication the most influential factor in our remedial efforts? The clinical data derived from actual experience furnishes the most trustworthy solution of the problem. In the laboratory preparation of predigested cod-liver oil, known as "HYDROLEINE," theoretical hypothesis has been confirmed by practical reality. Factual proof, secured by faithful and repeated experimentation, supports us in our assertion that "HYDROLEINE" represents a cod-liver oil as closely resembling the product of physiological fat digestion as science can produce.

Formula of HYDROLEINE:

Each dose of two teaspoonfuls contains

PURE NORWEGIAN COD-LIVER OIL,	80 m.
DISTILLED WATER,	35 m.
PURE PANCREATIN,	5 gr.
SODA BICARBONATE,	½ gr.
SALICYLIC ACID,	¼ gr.

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TRANSACTIONS OF THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION. Complete account of Ninth Annual Meeting held at Washingington, D. C., September 19, 20, and 21, 1899; also Tenth Annual Meeting held in New York City, September 25, 26, and 27, 1900. Illustrated. Pages xv-391. Size 9¼ by 6¼ inches. Price, extra cloth, $2.00 net, delivered. Philadelphia: F. A. Davis Company, Publishers, 1914-16 Cherry street.

This book containes a large number of valuable articles upon the subject of Electro-Therapeutics, which will prove highly interesting and instructive to all who are making a practical study of the subject.

Among the following titles of papers will be found some of the more important: "Electrostatic Treatment of Neurasthenia," by W. B. Snow, M. D.; "Treatment of Uterine Dieases for Women," by Prof. Felix la Torre.

A valuable paper by Dr. Snow on that new addition to medical therapeutics, the "Morton Wave-Current."

Dr. G. Benton Massey writes interestingly of the "Cataphoric Treatment of Cancer." As would naturally be supposed, considerable space is taken up with discussions of x-ray work, and the various recent improvements in that field of investigation. A somewhat unique feature of the work is the article by Rev. H. Newman Lawrence, on "Electro-Therapeutic Sins."

The book is full of similar articles of great interest and practical value to the electro-therapeutist, and to such, is highly commended.

THE FOUR EPOCHS OF WOMAN'S LIFE. A Study of Hygiene. By Anna M. Galbraith, M. D., Author of "Hygiene and Physical Culture for Women;" Fellow of the New York Academy of Medicine, etc. With an introductory note by John H. Musser, M. D., Professor of Clinical Medicine, University of Pennsylvania. 12-mo volume of 200 pages. Philadelphia and

London: W. B. Saunders & Co., 1901. Cloth, $1.25, net.

This is pre-eminently the day of preventive medicine. The physician who can prevent the origin of a disease is a greater benefactor than he who can lessen the mortality or suffering after the disease has occurred. Any contribution therefore, to the physical, and hence the mental, perfection of woman, should be welcomed alike by her own sex, and by the thoughtful citizen, by the political econmist, and by the hygienist.

In this instructive work are stated, in a modest, pleasing, and conclusive manner, those truths of which every woman should have a thorough knowledge. Written as it is for the laity, the subject is discussed in clear, comprehensible language, readily grasped even by those most unfamiliar with medical subjects. A valuable and commendable feature of this handy volume of instructive information is a comprehensive glossary of those medical terms necessary to a thorough understanding of the subject under discussion. Without doubt, it is a book that should receive the thoughtful consideration of every woman.

PROGRESSIVE MEDICINE, Vol. IV., 1901. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 400 pages, 13 illustrations. Per annum, in four cloth-bound volumes, $10.00. Lea Brothers & Co., Philadalphia and New York.

As usual with the volumes of this publication the contents for December are of such a varied and practical character as to appeal to all classes of medical men.

Under Diseases of the Digestive Tract and Allied Organs, Dr. Einhorn covers with great thoroughness the medical and surgical treatment of pathological conditions of the oesophagus, stomach, liver, pancreas and peritoneum. Among the important subjects considered are pancreatic disease, the importance of which has lately been brought so prominently before the professional mind; diseases of the liver, the surgical treatment of which has proved so efficacious; and the ever-recurring topic of appendicitis. In Dr. Belfield's section on Genito-Urinary Diseases the subject of general infection by the gonococcus is fully discussed, and tuberculosis of the genito-urinary tract receives the attention which its importance demands. Dr. Bloodgood's article opens with an especially full and important discussion of all the methods of producing anesthesia, both general and local; their relative value as regards efficiency and safety. In connection with this, he gives a description of the technique of lumbar puncture, its diagnostic and therapeutic importance and its use in spinal anesthetization. Wound treatment, infection, diabetic gangrene, are all considered at some length, and there is an especially valuable discussion on the importance of the examination of the blood in surgical cases. The various pathological conditions

of the kidneys are ably treated by Dr. John Rose Bradford. Particularly instructive is his discussion of the various forms of albuminuria and the varieties of uremia. Dr. Brubaker's section on Physiology presents the recent advances in physiology of the glandular system, with special reference to the therapeutic value of gland extracts in their therapeutic application. He also presents the most recent conclusions on the study of artificial fertilization. The section on Hygiene by Dr. Baker is notable because of the universal interest excited by the discussion aroused by Dr. Koch's statement that bovine tuberculosis is not dangerous to man, and the recent researches as regards the transmission of yellow fever. The Practical Therapeutic Referendum by Dr. E. Quin Thornton, although placed last in the book, possesses the greatest general interest and value to all practicing physicians. All the recent therapeutic methods and remedies are presented and their merits and demerits impartially discussed. It constitutes a therapeutic manual of the most advanced methods of treatment.

PATHOLOGICAL TECHNIQUE, Second Edition, by Mallory & Wright, is a manual for the laboratory worker, as the authors state in their introduction.

Part I. deals with the Post Mortem Examination, and is more especially of value to the general practitioner, giving with full consideration of detail the approved methods of autopsy-making.

We wish it had been possible here to have included a description in a general way of the significance of the microscopical changes in diseased organs, certainly those occurring in the kidney.

Part II. is all that could be wished for, whether as a reference for the laboratory worker, or the average physician. It would have been well from the standpoint of the practitioner to have included micro-photographs of the Klebs-Loeffler bacillus and the gonococcus, of slightly less power, say with 1-12 objection.

The book is so uniformly good and the illustrations so perfect that these criticisms are the outcome of a wish that there were more of it, and that it might be transferred from a manual into the more embracive text book class.

Part III. is fuller than the preceding parts and concerns Histological Methods. In the last few pages are short, but embracive, paragraphs on the Examination of Gastric Contents, Sputum and Feces.

In revising the book for the new edition the authors have kept in view the needs of the laboratory worker especially, whether student, practitioner, or pathologist, for a practical manual of histological and bacteriological methods in the study of pathological material. Many parts have been rewritten, many new methods have been added, and the number of illustrations has been considerably increased.

Among the many changes and additions to this edition may be mentioned the amplification of the description of the Parasite of Actinomycosis and the insertions of descriptions of the Bacillus of Bubonic

Plague, of the Parasite of Mycetoma, and Wright's method for the cultivation of Anaerobic Bacteria. There have also been added new staining methods for elastic tissue by Weigert, for bone by Schmorl, and for connective tissue by Mallory.

The new edition of this valuable work keeps pace with the great advances made in pathology, and will continue to be a most useful laboratory and post-mortem guide, full of practical information.

J. W. L.

Mosquito Brigades and How to Organize Them. By Ronald Ross, F. R. C. S., D. P. H., F. R. S. Published by Longmans, Green & Co., New York, and George Philip & Son, London, England.

The problem of how to get rid of the mosquito is probably the most pressing one affecting the tropics. Now that it is known that malarial fever, yellow fever, and elephantiasis are inoculated into human beings by the bites of these pests, comfort and security in the tropics depend upon the measures adopted to rid ourselves of these insects. The name of Dr. Ross is so intimately associated with the discovery of the malarial mosquito that anything he suggests for protection against this danger will receive earnest consideration. In the present volume he enumerates very readably the best known means of prophylaxis. He tells how to organize mosquito brigades from the first steps to the last stages of the campaign. Every sanitary officer should have this book and take to heart the lessons it impart.

University of Pennsylvania

Department of Medicine.

The 137th Annual Session will begin on the last Friday in September, 1902, at 12 m., and will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance upon four annual sessions is required.

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Medical News and Items.

Bubonic Plague is raging in the Fegi Islands.

Schools for nurses are to be established in Cuba.

Smallpox is quite general in many parts of the United States.

The Philippines are waging a war of extermination against rats.

Dr. J. Walter Hill, of Edgefield, S. C., died at his residence on the 13th of March.

Dr. R. L. Moore, who has done a successful eye, ear and throat parctice in Rock Hill, S. C., has moved to Columbia.

According to the report of the medical officer of health in London, cancer causes five thousand deaths annually in that city.

The South Carolina Medical Society will meet in Spartanburg on April 16-17th. The secretary's address is Dr. William Wesson, Columbia, S. C.

The North Carolina Medical Society meets in Wilmington the first week of June. Sharpen your pencils, you N. C. M. D.'s and get your papers ready.

According to a newly-discovered Chinese manuscript, a simple decoction of hemp was used in China over a thousand years ago as an anesthetic in surgical operations.

"Dr." J. P. Barney, of Cincinnati, was fined $21 and costs for collecting a dollar for a prescription he had written. He was not registered under the medical practice law.

The United States contains an army of about 130,000 practicing physicians, with an array of camp followers consisting of osteopaths, Christian scientists, magnetic healers, etc.

The Cleveland Medical Gazette in its seventeenth year, and *The Cleveland Journal of Medicine* in its seventh year, have combined interests to form *The Cleveland Medical Journal.*

E. P. Banning, of Fort Wayne, Ind., inventor of orthopedic instruments, and formerly a resident of Cleveland, filed a petition in bankruptcy January 21. Liabilities, $17,000, assets, $500.

The druggists of Philadelphia have organized for the incorporation of a stock company, capitalized at one-half million dollars, to own and manage retail drug stores. They expect to ultimately control two hundred stores in the city and State.

The old employees of Parke, Davis

Co. are offered the opportunity of chasing 4,000 shares of the com- y's stock at $55 per share, while market vale is $70 per share. is co-operative move on the part of company is in the right direction.

The Piny Woods Region of North rolina is coming rapidly to the nt as a health resort for people suf- ing from pulmonary troubles. McKnight, of Long Pine, Neb., l open a sanitarium at Southern es, N. C., for the open air treat- nt of consumptives.

Dr. D. T. Tayloe, a prominent sician of Washington, N. C., and mber of the State Board of Medi- Examiners, and his entire family re poisoned by arsenic, which had n put in the coffee and hash of ich the family partook at breakfast March 18th, by Jim Walkes, a col- d driver. Prompt action saved family, all of whom were seri- ly ill.

The Tri-State Society met in Ashe- e, February 25-27. The attend- e was not as large as could be de- d, but the scientific papers were nerous and of high order. As ual, the Asheville doctors gave the iting brethren a hearty welcome l spared no pains to make the visit Asheville one of pleasant memo- s. Dr. Burroughs, of Asheville, s elected president; Dr. R. Hughes, Laurens, S. C., secretary, and Co- mbia, S. C., was chosen as the place meeting for 1903.

A cleveland newspaper for January 1902, contained a whole page of wing testimonials from members Congress extolling the marvellous ues of a patent medicine whose nufacturers buy cheap whiskey by

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the carload and other ingredients by the pound. Comment is superfluous, but one cannot help wondering whether these wise men of the nation really did not know they were drinking and publicly endorsing flavored whiskey. The average Congressman is reputed to be capable of distinguishing whiskey from milk.—*Cleveland Medical Journal.*

(The above fits Peruna nicely.—Ed.)

Dr. W. E. Fitch, founder, and for many years editor and business manager of *The Georgia Journal of Medicine and Surgery,* published at Savannah, Ga., has sold his interest in the publication to his former associate and co-editor, Dr. St. J. B. Graham, who becomes editor, and sole propietor. *The Journal,* under Dr. Fitch's

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The Department of Public Safety, of Philadelphia, has decided, says *American Medicine,* to enforce vaccination on all inmates of cheap lodging houses. This is done with a view of reaching the vagrants and transients who are suspected of being a means of disseminating smallpox. To carry out this order effectually, the Board of Health sent its corps of physicians at night, under police protection, to the various cheap lodging houses along the Delaware River front. About one hundred sailors and laborers were vaccinated; many of these raised strenuous objections, but were restrained from forcible resistance by the proximity of the police. This attempt proved so successful that the crusade will be continued along the same lines. It is reported that the special corps of vaccine physicians who are making a house-to-house canvass have vaccinated about 200,000 persons. A circular advising vaccination and disinfection will be sent to every house within a radius of one square mile of any house that contains a case of smallpox. Circulars have been sent to all banks, business houses, etc., requesting that all moneys be thoroughly disinfected.—*Medical Age.*

The American Association of Urologists was organized on February

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22d, 1902, essentially for the purpose of further development of the study of the urinary organs and their diseases. Although most of the founders of the association are specialists in genito-urinary diseases, membership is not limited to those engaged exclusively in this specialty. Thus gynecologists who embrace renal and vesical surgery in their work are among the founders, as there are several gentlemen who devote themselves to the microscopy and chemistry of the urine, as well as a number of practitioners interested in the study of the kidney from a medical standpoint. The association consists of active, corresponding and honorary members, and is, in great measure, modeled upon the plan of the Societe Francaise d'Urologie, modified to suit American circumstances and conditions. Whenever possible, the branch associations throughout the United States, British possessions and Spanish America, will hold their meetings on the same evening as does the parent association in New York (the first Wednesday in each month). The work of the association is principally clinical for the demonstration of new methods of the technique of examination and treatment. The annual meeting of the American Association of Urologists will be held on the last day and the day following the annual meeting of the American Medical Association. The officers of the association are: Ramon Guiteras, M. D., president; Wm. K. Otis, M. D., vice-president; John Van der Poel, M. D., treasurer; Fred. C. Valentine, M. D., secretary; A. D. Mabie, M. D., assistant secretary.

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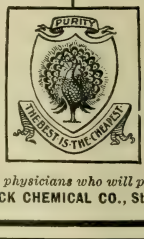

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EDGAR I. BRADLEY, M. D.
Elkhorn, Mont.

Smallpox Therapy.

The prevalence of a mild type of smallpox throughout the country gives the therapy of that disease especial interest at the present time. Vaccination is, of course, unquestionably not to be overlooked as a preventive measure, but in addition infection may be made much more unlikely and, where infection has taken place, the course of the disease is considerably shortened and shown its terrors by the administration of the valuable anti-purulent ecthol. The Battle Company has just issued a pamphlet dealing with the use of ecthol in this disease. The pamphlet should be in the hands of every physician who may be called upon to treat smallpox. It will be sent to any physician who makes the request.—*Medical Fortnightly.*

I fully regard Chionia as an excellent remedy and am highly pleased with its action in all cases of hepatic torpor and can especially laud its action in many cases of sick headache. This is the first testimonial I have given in twelve years, and have absolute confidence in its physiological action. J. B. YOUNG, M. D.
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JAMES H. CARR, M. D.
Buffalo, N. Y.

Mastoid Surgery.

There appeared recently in British medical journals several excellent articles, written by experienced prac-

titioners, setting forth the need of encouraging people to work out their health problems by natural processes, rather than to run impatiently to surgical means.

In the same line of thought, Dr. Edwin W. Pyle read before the Otological Section of the Academy of Medicine, in October, an essay on "A Conservative Element in Acute Mastoid Surgery," which embodies many practical truths, worthy of general consideration. Dr. Pyle believes that specialism cultivates a morbid readiness to detect disease and to operate; that a good degree of health is compatible with innumerable departures from the normal standard; that the ear in acute affections shares the same law of self-limitation as other parts of the body.

The natural tendency of acute otitis media is to recovery, and not to complication to the degree set forth by statistics compiled from the records of crowded cities. In proof of this his positive stitistics are given from the practice of twenty-five leading physicians, variously located in country towns, aggregating many years of experience, with only 80 cases of acute mastoiditis coming to operation. While these figures seem incredible to those accustomed to the frequency of the complication in hospital practice, they are nevertheless verified by the experiences of physicians distinguished for diagnostic, medical and surgical ability. The explanation must be sought partially in the peculiar reciprocal relation between demand and supply; that the operation of natural laws varies in different orders of beings through the influence of habit, heredity and environment. The conclusions formulated from clinical experience in this city are based upon a class of patients vitiated by dyscrasia and should not be compared with those where physical conditions, food and climate are more conducive to recovery. It is better to trust to the protection of reparative processes of nature than to the hand of the inexperienced operator. Dr. Pyle's article on "A Correlation of One Hundred Successive Mastoid Operations" shows that he is also familiar with the surgical aspect of the subject discussed.—*Medical Times.*

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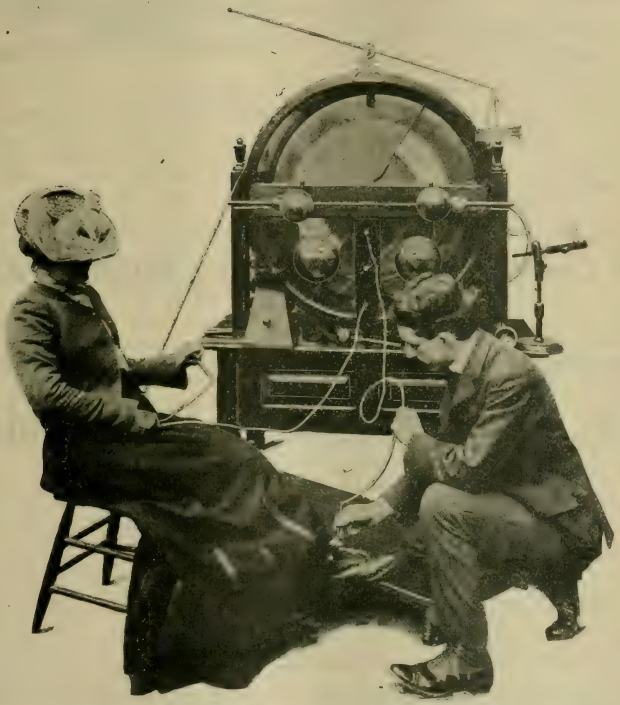

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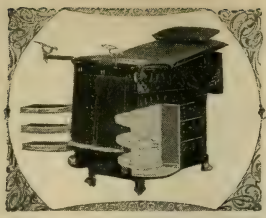

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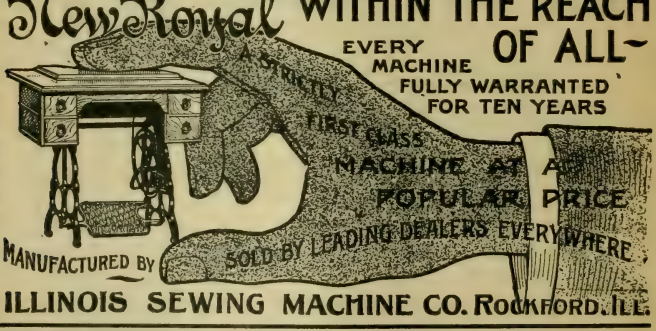
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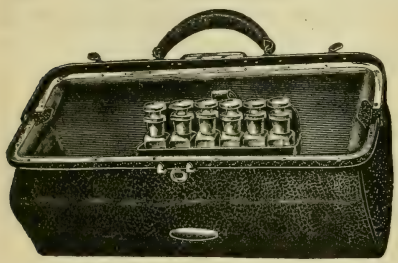

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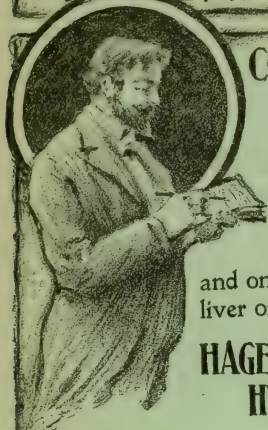

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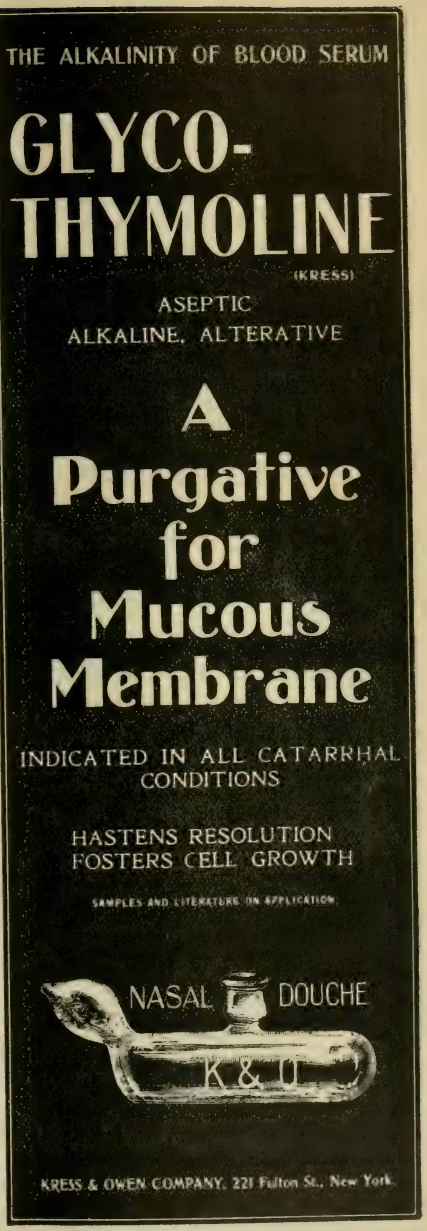

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A Monthly Journal of Medicine and Surgery.

VOL. XLVIII. CHARLOTTE, N. C., APRIL, 1902. No. 4.

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EDITORIAL.

THE FAILURE TO EXAMINE.

In medicine many more mistakes are made from carelessness than from ignorance. Doctors differ because one who is painstaking often solves problems not worked out by a more brilliant colleague—one is careful and the other is careless. There are those who are said to arrive at diagnosis from intuition; but on analysis it will often be seen that this quality of mind is merely the ability to reason rapidly from close observation. The brilliant diagnostician can, with a Napoleonic mental movement, run roughly over the essentials up to a correct conclusion. Yet, he must have a care lest his observation be faulty and his experience difficult, rendering his judgment fallacious. The most successful diagnostician is the one who takes each observed fact in its place, considers it in its relative importance, and decides accordingly. The judicial temperament is after all necessary for the soundest diagnostic ability.

The data obtained by observation, both in medicine and in surgery, are so important that no system of treatment should be instituted unless they are clearly obtained. And herein is our greatest sin of omission—the failure to examine carefully every patient who seeks advice. The careless habit of neglecting to make a physical exploration of each case is responsible for most mistaken diagnoses and countless therapeutic pittfalls. Some physicians may be so astute as to hit off the condition without examination, but no one can be sure until a physical demonstration has proved it.

These careless methods certainly do

not add to one's reputation; they rather tend to detract from or destroy it. Prescribing for a patient without knowing the exact conditions present often causes a loss of confidence. Time after time physicians give a man some medicine or salve for "piles," when such a condition did not exist at all, but some other rectal disease was found and cured by one who examined the same patient. Women are treated for womb complaint when their pelvic organs are perfectly normal, or are given tonics for their nerves when a torn perineum or diseased ovaries are at the bottom of the affair. Why? Because no examinations were made, or even proposed. Should such patients refuse to be examined it is justly the province of the physician to decline to treat them.

While it may require more time to make thorough examinations of each patient, yet in the long run it saves hours consumed in the undoing of careless work. Much more time and trouble are demanded by modern antiseptic methods in surgery, but they prevent an untold amount of labor. Formerly all the trouble came after the operation; now we take the pains before and have no trouble after. The stitch-in-time lesson is to be eternally learned by every practitioner in reference to his diagnosis as well as to his treatment. Every patient should be submitted to a thorough examination, so as to neglect nothing bearing on the case, and it should be approached with the feeling that some one is coming behind to pick to pieces every point and count up the things overlooked. Such a spirit as that will put a physician on his mettle and cause him to measure up to his true standard. When a patient is sent to a specialist, he goes as a perfect stranger and is given the most careful examination from head to foot, while the general practitioner, because that patient is his friend or acquaintance, thinks he knows the case thoroughly and fails to bestow on him that scientific scrutiny which is so necessary and which he, as a physician, is so capable of giving. Obliterating the personal equation and regarding each patient as a "case," often yields better results for both the patient and the physician.

H. A. R.

INFILTRATION ANAESTHESIA.

Dr. Paul Heinze, of Dresden, has made an elaborate study of the various methods of producing local anaesthesia. Dr. Heinze shows that a most important factor in the use of infiltration anaesthesia, is osmotic tension, which determines the occurrence of swelling or shrinkage of the tissues. This is common to all watery solutions—a definitely concentrated solution, is, however, osmotically indifferent and causes neither of these effects. Pure water for instance, is decidedly irritating to the tissues, and may cause an induration which persists for several days. If however, sodium chloride be added in certain amount, no such irritative effect follows, the osmotic tension being equal to that of the tissue fluids. The author believes that the best results from this method can only be achieved by an absolutely non-irritative solution, and this is especially the case where we have to deal with tissues that are already inflamed.

After stating that the two most commonly used local anaesthetics, eucaine and cocaine, in the strength

usually employed alter the osmotic tension of water to so slight an extent as do but little towards counteracting this irritative effect, the writer gives the following formula, which he claims is absolutely superior to the Schleich solution. The eucaine being equally effective as cocaine as regards its paralyzing action on the nerves, while possessing obvious advantages:

Beta-eucaine	grs. 1½
Sodium chlorid.	grs. 12
Distilled water,	oz. 3½

The salt is added, not as was erroneously claimed by Schleich, for its anaesthetic effects, but because its employment in the above strength renders it entirely non-irritating. The solution should be used at the body temperature, and it can be readily sterilized by boiling.

AFTER EFFECTS OF OPERATIONS.

Every now and again the question is asked as to whether or not the ease and safety with which surgical work of all kind is done in these days, does not tend to a too frequent resort to the knife; especially in cases when better results, so far as the comfort of the patient is concerned, might follow a more conservative course. Although the propounder of such questions is usually "sat upon" as behind the times, or himself accused of lacking a proper appreciation of the accomplishments of modern surgery, the fact remains that in many departments of operation work, these conservative ideas have borne fruit. Perhaps the best example of such a reaction is in the prevailing sentiment of the profession regarding the removal of the generative organs of woman. The rebound from the radicalism of even a few years ago is quite marked.

Again, it may as well be admitted that the ease and safety of modern operations, as compared with the time when a simple amputation of an extremity often resulted fatally, does offer a temptation to the skillful surgeon, difficult to resist. But while the tendency is to consider successful surgery as having been accomplished with the recovery of the patient from the immediate operation, it should not be overlooked that the object to be gained is not a demonstration of how much scientific mutilation the human body can successfully withstand, but its restoration as far as may be, to a normal condition. Not infrequently one sees chronic cases of hypochondrical tendencies, bearing the scars of one or more operations, which, while ostensibly exploratory, were really done for mental effect. While it is true that occasionally such procedures result favorably as to relief of the symptoms, in quite as many others the mental aspect of the case is quite as bad, or even worse, another neurosis being superadded.

The generally brilliant results of surgery have not yet sufficed to drive that instinctive dread of the knife, which will usually be found to reside in the mind of the layman. The quack who advertises to cure cancer without an operation finds abundance of material; likewise, he, who with much clamor announces his ability to painlessly remove hemorrhoids, reaps a rich harvest. The blind attempt of the average man to be healed of his disease by purely medical means, if it could be realized, is the highest development of medical art. To amputate a cancerous limb is after all a

confession of our inability to cure the malady. We do the next best thing, and get rid, at any cost save that of life itself, of the diseased part.

A Southern Physician's View of the Future of the Negro.

The negro question cannot fail to interest an earnest American, whether regarded from a political, social, moral or physical standpoint, With the three first of these a medical journal has no direct concern, although there is a more or less intimate connection between each.

The health of the negro, is however, a matter of professional regard to medical men, and one which has, within recent years, been the cause of much discussion.

Opinions vary as to whether the negro has improved or retrograded physically since his freedom. The larger number of those competent to judge declare that the colored race in the United States is decidedly less hardy and less prolific than before the civil war.

Dr. Seale Harris, Union Springs, Ala., read before the Tri-State Medical Society of Georgia, Alabama and Tennessee, at Nashville, on October 9, 1901, a paper on the subject, and commenced by saying that the negro race was the "white man's burden." He stated that after six year's experience as health officer and practicing physician in a county where the blacks outnumbered the whites by four to one, he was saddened by watching the ravages of tuberculosis, typhoid fever, syphilis and other diseases upon this generally kind-hearted and inoffensive people.

He called attention to the fact that before the war the negro death-rate in the South was less than that for the white, while recent statistics of most cities of the South, showed a negro death-rate of two to three times that of the whites, and in no Southern city did the negro birth-rate equal their death-rate.

Dr. Harris is of the opinion that "the three D's—dirt, disease and the devil," will be the principal agents in settling the question which faces the South. The writer does not credit the mortality statistics of the 1900 census, at the same time agreeing that there has been a considerable increase in the negro population, more than counterbalanced, however, in his opinion, by the moral and physical retrogression of the race.

Tuberculosis, syphilis and malarial fevers are the chief causes of the negro excessive death-rate and physical deterioration, but this Southern physician asserts that all diseases are on the increase with them, and further makes this important statement that while he has no statistics to show the mortality of carcinoma among the blacks, he believes it to be increasing among them at the same rate at least as among the whites.

As to the remedies for such an appalling condition of affairs, none, thinks the writer, can save the negro from racial extinction. Nevertheless, according to his views, whatever is done should be effected in the way of sanitary reforms, and provision of free hospitals, sanitorias and dispensaries for the treatment of their sick, rather than in spending thousands in training their minds.—*Medical Record.*

The Carolina Medical Journal.

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ORIGINAL COMMUNICATIONS.

A Report of a Case of Tertian Estivo-Autumnal Malarial Fever and Two Cases of Hemoglobinuric Malarial Fever.

By W. E. Fitch, M. D., Member American Medical Association, American Medical Editor's Association, Medical Association of Georgia, Medical Society of the State of North Carolina, Savannah Medical Society, Editor of the Georgian Journal of Medicine and Surgery, Savannah, Ga.

In Southwest Georgia we see and treat all the clinical types of malaria, though I might say right here that there are two classes of cases of the pernicious type of malarial fever which we do not treat long, for they are dead a few hours after the first visit. These forms are fortunately rarely seen, but when met with you have your hands full. In the comatose variety of pernicious malarial fever, the patient is struck down with the most intense cerebral disturbances, frequently passing into a comatose condition, lasting from twelve to twenty-four hours, and ending in death.

The algid form of this type of malarial fever sets in with gastric symptoms accompanied by great prostration. The patient complains of being chilly (no chill); the temperature is normal or subnormal; the pulse feeble; the respiration accelerated; there is severe choleriform diarrhea; the urine is diminished or suppressed; nausea and vomiting are continuous. This condition lasts for a few days, the patient dying of profound asthenia. In these pernicious forms of malaria treatment is of little or no avail. The patient dies in spite of the most heroic treatment. The repeated examination of blood from this class of

patients demonstrates the presence of the estivo-autumnal parasite.

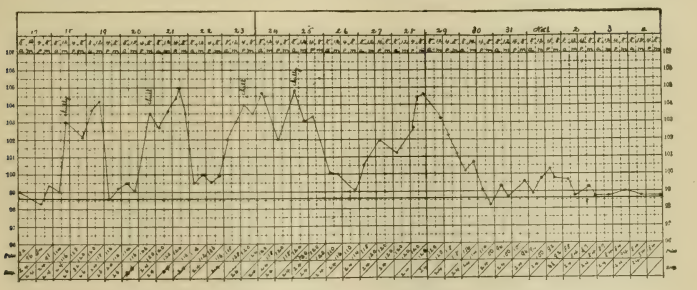
Tertian estivo-autumnal malarial fever and homoglobinuric malarial fever are severe types to handle, and I beg to report one case of the former, and two of the latter types, with treatment and results. In reporting these cases, I shall, for the sake of brevity, omit features of family history and previous illness, that do not bear directly on diagnosis and treatment.

Case I. Tertian estivo-autumnal fever. On October 17th, I was called to see Mrs. A., who gave the following history: She had noticed loss of appetite for some days, and suffered from pain in the back and legs, frequent urination, nervousness, and a general feeling of being unwell. During the paroxysms, just before the onset of the cold state, the patient complained of a feeling of weakness, slight headache, and constant desire to yawn. She did not have a distinct rigor, but a chilly sensation along the spinal column designated as a "creeping," chilly sensation; following this she developed marked malaise together with nausea and vomiting. The headache had become violent, the patient being mentally depressed. The skin presented the well-known appearance of "goose flesh"; the mucous membranes were cyanosed; the patient stated that the extremities felt cold and heavy; the legs and back ached, pain being greatest in the lumbar region; the tongue was broad and flabby and heavily coated; respiration rapid (32); pulse weak, rapid (128) and irregular. The patient stated that the cold stage lasted about 30 minutes, after which she experienced a sensation of heat coming on as localized flushings, which soon became general. The eyes were suffused and brilliant, the face red, the entire skin dry and hot. The pulse was rapid and dichrotic, the respiration hurried, and apparently difficult.

October 18th, the headache was intense, with marked nervous excitement. The pain in the back and limbs was quite severe and agonizing; temperature was elevated, 103 F. This stage lasted two hours, and was followed by stage of remission in which the symptoms became milder and gradually disappeared. On October 19th, the temperature dropped to 99 F., the sweating was slight, but the headache did not altogether disappear.

On physical examination the lungs showed slight areas of lessened resonance, with the rales chiefly sibilant in character; the spleen was greatly enlarged, extending very nearly to the umbilicus; on deep palpitation the margins were made out, the organ being plainly palpable, and was found to be soft and rounded. The liver was also found to be greatly enlarged and tender. The urine contained albumin. The blood, upon microscopical examination, revealed numerous tertian estivo-autumnal parasites. The blood was examined at frequent intervals, and numerous ring forms and pigmented rings were found; no segmenting forms were observed; the "ring" forms were larger than those of the quotidian parasites, irregular in shape, most of them presenting some enlargment at some portion of their periphery, thus presenting the so-called "signet ring" appearance. They were very refractive and sharply outlined, looking as though they were stamped into the corpuscle, the

protoplasm was clear and the amoeboid movements sluggish. No corpuscle was observed to be infected by more than one parasite; the pigmented rings and pigmented bodies were observed in small numbers. The pigmented rings showed a few of fine pigmented granules generally in the dilated portion of the rings; the granules were often observed to be in rapid motion, and the pigmented rings still showed amoeboid movements. The pigmented parasites were larger than the rings, being nearly one-half as large as the infected corpuscle; they were sharply defined, the protoplasm being readily refractive and finely granular in appearance. The pigment was in the form of reddish brown granules, and had a markedly vibratory movement.



Chart, Case I.—Tertian Estivo-Autumnal Malarial Fever.

A study of the accompanying temperature chart for this case beautifully illustrates the peculiar temperature curve in this type of malarial fever. It will be noted that the paroxysms occurred at intervals of forty-eight hours, approximately, and lasted from thirty-six to forty-eight hours. It also shows well the several characteristics of the curve noted before.

Taking the paroxysms of the 20th for example, we see beautifully illustrated the rise, the period of slight remission, the pseudo-crisis, the pre-critical rise, in which the temperature reached (105) the highest point during the disease, and lastly the crisis in which the temperature gradually returned to normal. The intervals between paroxysms were short, as shown by the chart. It will also be observed by close examination that two of the paroxysms were accompanied by chilly feelings, while two were accompanied by distinct chills. As a general rule, the temperature goes to normal or below during the intervals, but in this case it did not, except in one instance.

In the treatment of these cases rest is of much importance, and every case of estivo-autumnal malarial fever should be confined to bed so long as there are active symptoms present. Diet in all cases should be light. During the paroxysms it should consist of milk, soups, soft boiled eggs, etc., after the acute symptoms have abated, a more liberal diet may be ordered, and the more nutritious it is the better, for the anemia and debility sometimes following these cases are often astonishing. In the medical treatment of this disease,

we have two drugs upon which to rely, mercury to stimulate the liver cells, and the cinchona alkaloids to destroy the parasites. This patient received the following prescription when first seen:

℞

Calomel,	gr. 8
Res. podophyllin,	gr. ¼
Ext. colocynth co.,	gr. 8
Ext. euonymin,	gr. ¼
Sodae-bi-carb,	gr 12.

This was made into eight capsules, one to be administered every half hour until all were taken, and followed in four hours with a tablespoonful of sulphate of soda in half a glass of water. This produced several blackish-green stools, and was ordered repeated again in twenty-four hours, after which the quinine salt was administered. Experience has long since taught me the necessity in treating malaria, to begin first with the liver, after which the salt will act much more satisfactory.

As early as 1640, cinchona was introduced into Europe, and immediately gained a well deserved reputation in the treatment of fevers of malarial origin. The beneficial action of cinchona upon malarial fevers is due to the fact, that its alkaloid, quinine, is a protoplasmic poison, acting directly upon the malarial parasites. Binz, in 1867, was the first observer to enunciate this theory of the action of quinine, and Golgi, Mannenburg, Marchiafava, Celli Bignami, Sternberg and others, have proven its truth. All these observers demonstrate that the alkaloids of cinchona cause the degeneration of the young malarial parasites most marked at the time of segmentation. Marchiafava and Bignami have carefully studied the effects of the alkaloids of cinchona upon the estivo-autumnal parasite and conclude their observation as follows: "The quinine acts upon the malarial parasites in that phase of their life in which they are nourished and developed; when the nutritive activities cease by an arrest of the transformation of hemoglobin into black pigment, and the reproductive period begins, the drug is most effectual in its action."

My observation in the treatment of malaria has taught me that to be most efficacious the cinchona alkaloid must be present in the blood when segmentation of the parasite occurs, as it acts most energetically upon the newly-born parasites.

It must also be remembered when prescribing cinchona or its alkaloids, that their action takes place six hours after administration, so to obtain the maximum effect of a given dose, it should be given six hours before the attack.

In quotidian malarial fever the apparent onset of the attack is marked by the chill, but the actual commencement occurs two hours earlier. It would therefore be a mistake to administer cinchona or its alkaloids six hours before the chill. The varying length of the interval between the apparent and the real commencement of the attack in the various forms of fevers gives rise to the following rules:

In quotidian fever the drug should be administered eight hours before the next expected chill. In tertian fever it should be administered twelve hours before the expected paroxysm. In quartam fever it may be given

eighteen hours before the chill. In pernicious and ifregular cases this rule cannot be applied, for the drug must be given immediately.

As to the form of cinchona to be administered—the alkaloid, quinin, is the most potent, yet there are ten salts of quinin which are, or have been, used in the treatment of estivo-autumnal malaria. Of these, there are two which merit general use. These are the sulphate and bimuriate. The sulphate contains 75.51 per cent. of quinine, the bimuriate 81.61 per cent. The former is soluble in the proportion of one part to nine of water, the latter in the proportion of one part to ninety-six parts of water. From this it will be seen that the bimuriate is to be preferred theoretically, but practically, the sulphate is the most used on account of its cheapness. Both, however, have objections; they are bitter and disagreeable to take, and produce cinchonism, which to some patients is very annoying and often unbearable. I have for the past several months discarded quinin for saloquinin, which is an ester of salicylic acid and quinine, having for its formula:

C_6H_4. OH. CO. O. C_{20} H_{23} N_{20}.

Its melting point is 140 degrees C. It is readily soluble in chloroform, hot alcohol and benzol; difficulty soluble in ether and cold alcohol. Alcoholic solutions with Fe_2 C_{16}, give a brownish-reddish color. On sponification a liberation of salicylic acid takes place which can be detected by the iron chloride reaction. In soda, the combination is insoluble.

It is especially to be noticed that the presence of salicylic acid in saloquinine gives it a stronger power than quinine of acting upon infusoria. Saloquinin 1-48,000 has been found to correspond in destructive effects to quinine 1 40,000. The fatal doses in frogs, on the other hand, were in an inverse ratio. To kill a frog weighing 100 gms., it required 1.4 saloquinine to 1.0 hydrochlorate of quinine. From the physiological experiments it appears that there is no elimination of the unsaponified base in the urine of rabbits and dogs, for it was not possible, even after many trials, to find a positive trace of salicylic acid in the urine. It is probable that the small and gradually liberated quantities of salicylic acid disappear from the organism owing to oxidation.

The dose of saloquinin is one and one-half times that of quinin. It is advisable to follow its administration, especially in febrile patients, in whom the gastric juice is apt to contain but little acid, with a weak solution of hydrochloric acid. It is readily taken by placing 10 to 20 grains of the dry powder on the tongue, when a half wine glass of water carries it down. No disgusting, bitter taste is experienced, as in the case of quinine, and this is a great advantage in children, who will eat it like sugar. I have not had any annoyance reported to me from taking enormous doses, whereas, from quinin, sometimes the cinchonism is unbearable.

Another glance at the temperature chart will show the rapid decline of the temperature curves after beginning the use of saloquinin.

Case II. Malarial Hemoglobinuria. On September 17, 1901, I was called to see Mrs. J. E. D., aged 33, weighing 97 pounds, who had been

suffering from attacks of quotidian malaria for the past two years, not more than one lunar month intervening between the attacks. On September 15th, she had a chill, followed by slight fever, and began to take quinine. The next day she had an excerbation of fever, without chill, and on the morning of the 17th she had a hard chill, followed with high temperature, 105 degrees F. The patient suffered from nausea, vomiting, severe frontal headache, and pain between the shoulders, bowels constipated; urine bloody. On examination, I found the patient anemic and emaciated; the skin very yellow; the face flushed; the tongue heavily coated with thick yellowish fur, and flabby; the conjunctiva yellow; lungs and heart normal; pulse full and bounding, about 120 beats per minute. The liver was congested and tender; the spleen very large and tender, reaching almost to Poupart's ligament and about one and one-half inches thick, and three and one-half inches wide (these dimensions were easily made out, as the abdominal walls were very thin, and easily palpable); some tenderness over the abdomen on deep pressure, probably due to weight of the spleen.

I prescribed acetanilid to reduce the high temperature, with an anodyne for the pain, and ordered the patient to the hospital. At 6 p. m., as shown by the accompanying chart, the temperature was 102 degrees F., with pulse 100.

As soon as placed in the hospital, I made a blood examination, and found the estivo-autumnal parasite as the exciting cause. On subsequent examination, it was found that they were most numerous in the blood during or just after a paroxysm, two forms of this parasite being present, the ring and pigment forms. The urine was at once examined: color, bright red; specific gravity, 1024; reaction, acid; albumin trace; no sugar; a number of granular bodies and a quantity of granular detritus; no blood cells, but the presence of hemoglobin was determined by spectroscopic examination.

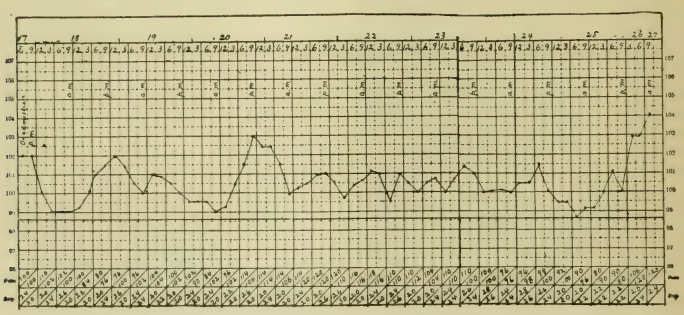


Chart I., Case II.—Malarial Hemoglobinuria.

This being clearly a case of hemoglobinuric malarial fever, I gave the husband a very unfavorable prognosis, and ordered the following:

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Calomel,	gr. 8
Podophyllin,	gr. ¼
Ext. colocynth co.,	gr. 8
Sodii bicarb.,	gr. 12

Made into eight powders, with directions, one powder every hour, until all were taken, to be followed by a tablespoonful of sulphate of soda and quinin 20 grains, morphine ¼ grain, to produce quiet.

On the 18th, at 10 a. m., I found that she had just had a rigor without any rise in temperature (still 102 degrees F.). She had voided eight ounces of dark urine about like the sample of yesterday. The result from the calomel compound was satisfactory several dark greenish-black stools. Sulphate of quinin 25 grains, was ordered every morning between seven and nine a. m., followed by hydrochloric acid in sweetened water. Liquid diet and stimulants were allowed.

She vomited occasionally, and wore an anxious expression. Although complaining of cinchonism and deafness, treatment was continued.

On September 20th, I found the patient with a temperature from 102 to 103 degrees F., the pulse ranging from 84 to 100 per minute. The skin still was yellow; nausea and vomiting were subsiding; the deafness increased. It will be noted by a glance at the accompanying chart that the pulse and temperature readings are very interesting.

Under the use of quinin, which was administered daily in gradually increasing doses up to fifty grains a day, always followed by dilute hydrochloric acid, there was little if any benefit after continuing this treatment for ten days. The urine remained bloody, the temperature elevated, and the pulse still increased in frequency.

On September 27th the patient had a hard chill, which left her greatly prostrated, leaving her soaked in a profuse perspiration. The temperature was 104 degrees F., pulse 125; patient weak and quite relaxed; sclera brownish yellow; skin lemon color. She complained of cinchonism, and had just passed ten ounces of bloody urine. Feeling that the case was very critical and that quinin had failed to control the fever or destroy the malarial plasmodium, as repeated blood examinations demonstated the continued presence of the estivo-autumnal parasite, it seemed to me imperative to resort to some other mode of treatment.

I decided to try saloquinin and ordered one drachm in ten grain powders, and directed one powder to be given every half hour, and continued until all were taken, with eight drops of dilute hydrochloric acid in water after the third and sixth powder. This was ordered at 9 a. m., each morning. At 9 p. m., September 27th, the temperature had fallen to 102 degrees F., and the pulse 100 per minute.

September 28th, at 9 a. m., I found the patient had passed a fairly comfortable night, but complained still of cinchonism; pulse 104, temperature 99 degrees F. The urine was straw colored for the first time since the attack begun. The saloquinin was continued in the same dose, and calomel ordered in the combination mentioned above.

September 29th, the patient passed a comfortable night, and had a bright

expression; cinchonism had subsided; nausea and headache abated; temperature 99 degrees F.; pulse 100. As she asked for food, diet was increased. Port wine was added. Her condition became more hopeful.

rise in temperature, and on the 19th she had a repetition of the same. On the 20th, she had a severe chill, followed by a high fever, and in the evening passed some "bloody urine" that was thought to be menstrual discharge. On the 21st she had a se-

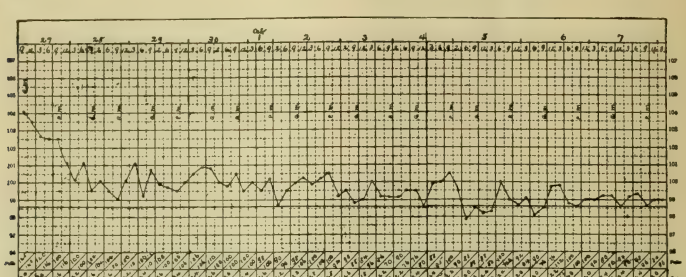

Chart II., Case II.—Malarial Hemoglobinuria.

From a close observation of the chart, the reader will note that the pulse and temperature gradually and slowly returned to normal. The urine cleared up after the first day's (September 29th) administration of saloquinin, and remained free from coloring matter thereafter.

The patient was dismissed from the hospital on October 7th, with pulse, temperature and respiration normal. I advised her to go to the mountains of Virginia, and after two months' stay, she returned home to Savannah in better health than she had enjoyed for several years.

Case III. On October 20, I was called to see Mrs. M., brunette, aged 22. She had suffered with repeated attacks of malaria since July 1900, sometimes quotidian, and at others tertian. She had been free from a paroxysm about one month, when at noon on October 18th, she had a slight chilly sensation, followed by a vere chill, lasting two hours, followed by a high rise in temperature, 104 degrees F. The treatment had been laxatives including calomel, which, in this instance, acted well, and 20 grains of sulphate of quinin. On the 18th, 40 grains of sulphate of quinin were given; on the 19th, the same amount, and on the 20th I was called at 7 p. m., and found a marked malarial cachexia present. On physical examination, I found the spleen was very much enlarged, three times its normal dimensions, soft and tender. The liver was quite large and also tender; her skin and sclera were tinged lemon yellow. She was very restless, and vomited frequently. Temperature 103 F., pulse 120, and respiration 22. A specimen of the bloody urine showed numerous casts and detritus and much albumin, with a specific gravity of 1019.

The case being clearly one of hemoglobinuric fever, and as this was the

second pernicious paroxysm, I gave her at once 40 grains saloquinin and a hypodermic of $\frac{1}{8}$ grain morphine and 1-200 grain of atropine, ordered 25 grains of saloquinin in four hours followed by a solution of hydrochloric acid, and directed that she be fed every three hours on liquid food.

On the 21st, at 8 a. m., the patient had vomited nearly all night, and at this hour she had voided about eight ounces of red urine, which was somewhat lighter than the evening before; she had retained but little food. Nausea and vomiting had caused her great distress. At noon the temperature was 101 F., pulse 120, respiration 20; skin and sclera were dark yellow. Urine still bright red. Patient partially under the effect of saloquinin and vomiting much relieved. I ordered a repetition of the calomel and podophyllin co., and saloquinin 1 drachm at 6 a. m. and 6 p. m., daily.

On the 23d, at 8 a. m., the patient had vomited nearly all night, and was so nauseated at 7 a. m., that she could not take her medicine. The urine had cleared up, but contained more casts than formerly. I ordered fluid ext. buchu and potass. acetate, four times a day, and port wine once every two hours; mustard plasters to stomach and an enema of salts. The patient had a recurrence of the paroxysms at 3 p. m., but without a chill, the fever running up to 104 degrees F., pulse 132. The urine was quite yellow and scanty. The sclera and skin were very dark yellow; the skin over the face, especially the cheeks and forehead, becoming black on the surface, apparently a necrosis of the upper layers of the skin. The diuretic and wine were continued.

On the 24th all the symptoms had improved. Temperature 102 F. Treatment continued. Upon each succeeding day the temperature ran higher, with the afternoon temperature one to two degrees higher than in the morning, evidently due to some septic condition. There were no further indications of malarial paroxysms, and the urine continued clear and was rapidly becoming free of casts and albumin. On the 30th it was normal and her temperature ran to 105 in the afternoon, from which it gradually fell until November 15th, when I discharged the patient with normal temperature of 99 degrees F.

In selecting these cases for your consideration, I took those in which the effects of treatment were most manifest, and in which indications for a different treatment were most in evidence.

I take for granted that every member of this society recognizes hemoglobinuric fever, hemorrhagic malarial fever, swamp fever, black jaundice, or black water fever of the Europeans, as a pernicious malarial fever in which the urine is laden with the coloring matter of the blood, and of which the malarial parasite is the active causative agent. The other etiological factors are no doubt the liver, spleen and kidneys; hence the rationale of all treatment should be to kill the plasmodia and restore these organs to their normal condition. In this there is a wide divergence of opinion, the profession being equally divided, and only by logical consideration of each theory of treatment and careful observation of its effects and results can we ever reach the correct treatment of malarial fever.

All physicians alike have been taught that quinin is the treatment par excellence for malaria in all its forms except hemoglobinuric fever. Here one school maintains that quinin in large doses is essential to destroy the malarial parasite, while another contends that quinin, by increasing the irritation of the kidneys, adds an element towards producing the hemoglobinuria. How will the physicians of the first class prove that quinine does not produce hemoglobinuria? In case first, the urine continued bloody from the 17th to the 25th, and quinin was regularly administered up to 50 grains daily —still the hemoglobinuria persisted. In the second case the patient had been under the influence of quinin five days, as much as 40 grains daily, and hemoglobinuria continued. In both cases immediately upon stopping quinin and substituting saloquinin, the hemoglobinuria also stopped, and did not return, and both patients made uninterrupted recoveries.

Puerperal Eclampsia.

By Dr. W. W. McKenzie, Salisbury, N. C.

Eclampsia is an acute disease occurring in women in pregnancy, in labor or in child-bed; often sudden in its onset, rapid in its progress, characterized by convulsions, with loss of sensation and of consciousness, ending in coma.—Bailly.

The disease is most frequent in the last months of pregnancy, though it has been observed as early as the first month.

Considering eclampsia as it may occur in pregnancy, in labor or in child-bed, its frequency, according to Kleinwachter and Galabin, is one in five hundred; Kormann makes the proportion one to six hundred, while Cazeaux stated it one in two hundred. Lusk found one fatal case in about seven hundred deliveries. Anvard gives three in one thousand; Martin and Kaltenbach one in five hundred. Vinay one in two hundred and fifty or two hundred and sixty. The last statement is thought to be approximately correct.

The report of the Philadelphia board of health shows that in the five years, beginning with 1868 and ending 1872, there were 47,191 children born, and in that period one hundred and thirty-two women died from eclampsia. Assuming that the disease was mortal in 25 per cent. of cases, that is, three recoveries for one that died, we believe that this is a fair estimate of the mortality; the entire number of cases of eclampsia occurring in the five years was five hundred and twenty-five or one in one hundred and seventy labors; from 1888 to 1892 inclusive, there were 141,235 births and ninety-nine cases of death from eclampsia. Approximately then, there were three hundred and ninety-six cases of the disease in that period, or one to three hundred and eighty-one labors.

It appears, therefore, that the disease was more than twice as frequent in the first period as it was in the second. This cannot be regarded as absolutely accurate, for some of the births were plural, hence the entire number of children born must be greater than the actual number of births. Further, patients suffering from eclampsia may have died from

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Presented to the Tri-State Medical Society at Asheville, February 25-27, 1902.

septic or renal diseases and the death have been thus reported.

It cannot justly be assented that there has been such advance in the treatment of the disease that the mortality has been lessened more than half. A partial explanation of the difference is given by the fact that eclampsia is more frequent at certain times than at others.

Kaltanbach directs attention not only to this fact, but also to these: the disease occurs more frequently in certain places, and likewise varies in its severity. In illustration of the variations in pregnancy of eclampsia at certain times, the statistics from which I have quoted, show, estimating the actual number from the number that died, that in 1891, there were one hundred and thirty-six cases, or one in two hundred and thirteen labors, but in 1890 and 1892, the proportion was only one in four hundred and ninety-six labors—not half so many in the two years as in the intervening years.

Kaltenbach states that while the disease may appear toward the end of pregnancy, it is most frequent in labor, most seldom after. Parvin says eclampsia is less frequent in child-bed than in pregnancy or in labor—more frequent in primipara than in multipara, and in pleural than in single pregnancies. Bailly has taken the position that the order in frequency is pragnancy, labor and the lying-in, and he has attributed, as we believe justly, the discrepancy so common among authorities, in part to the fact that, as the disease so generally induces labor, cases that really begin in pregnancy have been included in those that belong to labor, sufficient care not having been taken to observe the actual time when the attacks commenced, nevertheless the statistics of Golburd (including 1,120 cases, shows that in 21.07 per cent. the diseases appeared in pregnancy; in labor 56.34 per cent. and after, 22.59 per cent.) cannot be set aside, and we accept the results, or at least approximating the results, though doubting the absolute correctness as to the very large percentage of cases occurring during and after labor, while we believe that the percentage of those that happen before labor is too small.

If eclampsia occurs in labor it is usually in the first stage, if after labor it usually occurs in a few hours, but the interval may be several days or even some weeks. Bailly saw a case twenty-nine days; Simpson saw one four weeks after labor.

Premonitory Symptoms.

These occur in almost all cases. The most important are headache, defective vision and epigastric pain. The headache is generally in the forehead, and in some it is in one or the other side of the forehead—it is rarely in the occiput.

Hamilton referred to frontal pain as especially characteristic; at first it is not continuous, but has irregular intermissions, or at least remissions; when it becomes constant the attack is at hand. Other symptoms are dullness of intellect or apathy; the patient too, may be sleepless or drowsy. Disturbance of vision in very many cases is observed. This is usually at first simply indistinctiveness of sight or inability to use one's eyes for more than a few minutes at a time. The letters on the page which the patient

is reading are blurred, or she cannot take the stitches in the work she is sewing, in the right place, she wearies in the effort and lays aside one or the other of the objects. In rare cases, more or less complete blindness may be present for hours, or even days, before the attacks; in other instances amblyopia, hemiopia or diplopia is manifested. Epigastric pain is the least frequent prodromata. If present it may be so severe that the patient groans and often screams out with the suffering. She leans forward to relax the abdominal muscles, and usually has with the pain opression or difficulty in breathing. Other premonitory symptoms have been observed in some cases, such as vertigo, vomiting, somnolence or insomnia, ringing in the ears, irritability of temper and despondency. After a longer or shorter duration of some of the prodromata, the convulsive manifestations come abruptly. The patient lying in bed may have been talking to you one minute, the next she is silent, and you see her face in complete repose, her eyes fixed apparently upon some distant object, and her body motionless; this is the brief calm which preceeds the terrible storm. While you are looking, and possibly, if it is your first experience, wondering why her speech has so suddenly ceased, the storm begins with quick movement of the eyelids and of the nasal alae, then of all the muscles of the face. The eyelids rapidly open and close, the pupils are dilated and insensible to light, the eyeballs move in various directions, then are half hidden beneath the upper lids, the face turns toward one and then the other shoulder, the mouth is distorted, usually deviated to the left. The wave of convulsion extends to muscles of trunk and limbs, back is arched as from opisthotonos; the lower and upper limbs are rigid and usually extended; the thumb is flexed upon the palm, and the fingers contracted over it. The diaphragm and thoracic muscles are involved, and respiration is arrested; the livid pallor of the face is succeeded by a dusky red hue; the face is swelled and indicates asphyxia; the muscles at base of tongue causes it to protrude from the half open mouth, and it is in many cases severely bitten, and blood mixed with saliva escapes from the mouth. The muscles of larynx, by their contentions, prevent the ready escape of air from the compressed chest and it passes out with a hissing sound. In ten to twenty seconds, clonic succeeds the tonic convulsions; these begin in the face and then affect the muscles of the body and limbs; the jaws open and close violently and rapidly, the tongue may be again wounded; breathing is stubborn, irregular and difficult jerking movements of body and limbs occur rapidly. The sudden transition from calm to storm is not more striking than the rapid transformation of the face and expression; the convulsions destroy every trace of beauty and intelligence that may have been present a few minutes before. The face is disfigured, distorted, discolored, and while calling for pitiful and active sympathy, may be even hideous or repulsive. In most cases in half an hour after the convulsive movements have ceased, the patient wakens first into a sort of semi-consciousness; she looks upon those surrounding her bed, and does not at once recognize them; when the recognition comes, she does

not understand the anxiety which their countenances so often betray; her face has a sadly bewildered expression; the past, so far as the convulsions are concerned, is a perfect blank, and the present a temporary cloud. In rare cases the patient's recovery immediately begins, and is rapid and perfect, but in the majority, eclampsia is not limited to a single attack. Other attacks generally follow, the interval varying from a few minutes to several hours; the attacks may be so rapid, the intervals so brief, that the patient passes directly from coma to convulsions without a moment of even partial consciousness intervening. The number of attacks may be only two or three or ten to twenty, or there may be more than a hundred. Charpentier refers to a case observed by Crettel in which there was one hundred and sixty. The urine, which is usually scanty, contains albumin; in some cases it is smoke-colored or red from presence of blood. Pulse varies in frequency from 100 to 140, and even more. The temperature progressing increases during the continuance of attacks; it may reach 104 F., or go even higher. After death, still greater elevation of temperature is observed. (Parvin.)

Eclampsia usually terminates within forty-eight hours, and the great majority of patients recover. A fatal result rarely occurs during the eclamptic attack. More frequently the patient dies from a gradual asphyxia caused by pulmonary edema or congestion. Cerebral apoplexy is the cause of deaths in some cases. Pneumonia is not an infrequent cause of death, and puerperal infection also is a cause. Acute yellow atrophy of liver is a cause. Lastly, the profound toxaemia, regardless of complications or consequences of the eclampsia, is the cause of death in some cases.

As a consequence of eclampsia mental defect and disorder may appear. Amnesia reports represents the former and insanity the latter. Amnesia may be temporary or last for many weeks or months, and in some cases it relates only to recent events; in other, the knowledge of years may be blotted out.

Etiology.

The essential cause is toxaemia, not one, but several different poisons may be concerned, so, too, the toxaemia, while usaully associated with renal failure and dependent upon it, does not in all cases have such association and dependence, for the disease caused by toxaemia may occur without renal disorder, moreover, it is a question in some cases whether this disorder is not the consequence rather than the cause of the toxic condition. The source of the toxic agent or agents, I think, is auto-intoxicative. Bonehard has said that "man is constantly menaced by poisoning; he labors each instant for his destruction, makes incessant attempts at suicide; nevertheless this intoxication is not realized, for the organism has multiple resources to escape it."

The liver plays an important part in the destruction of poisons and eliminations by the lungs, by the kidneys, by the skin, by the intestines, assist in the protection of life from poisoning. The most important agents in

eliminating are the kidneys. Then, in the etiology of eclampsia the non-elimination by the several emissatories mentioned must be placed at the beginning of the trouble, and the toxic matter may be maternal in origin, yet it is a question whether or not the foetus and even the placenta have a part in the etiology of poisoning.

Treatment.

There are no specific remedies in this disease, and no one plan of treatment to be constantly persued.

The prophylactic treatment: avoidance of constipation and securing free action of kidneys and skin.

Winkles' remedy for the avoidance of constipation is a good one. A pill composed of the extract of aloes and colocynth in sufficient quantity to cause free watery evacuations, to be given every morning. The hot baths is the best means for producing activity of the skin. This bath should have a temperature of 100 degrees F., the patient to remain in it at least fifteen minutes, and upon coming out of it be wrapped in warm blankets, drink a glass of hot milk, and remain in a warm room for two hours. Abundant perspiration will then result. An absolute milk diet; the diuretic effect of milk may be promoted by alkaline mineral water—Rubinot, apenta, etc. For the albuminuria, one drop of nitroglycerine three times daily, as recommended by Dull and Chloral, Vinay speaks of highly. He states that when albumin is abundant, and headaches, irritability, restlessness, vertigo, disturbance of vision, etc., are present, chloralization of parturients is of the greatest value. Amount given daily should be, in most cases, 45 grains. In grave and persistent albuminuria, no benefit having been obtained by hygienic and medical means, and eclampsia threatened, the artificial interruption of the pregnancy may be clearly indicated when convulsions occur. We must prevent patient from injuring herself. Prevent biting of the tongue by means of a napkin stretched between the teeth and grasped on either side. I believe strongly in bleeding when the woman is a strong, plethoric one with great cyanosis. It removes instantly a certain amount of poison from the circulation, and it further removes from the convulsive centres the poisoned blood by restoring contraction of the small blood vessels as claimed by Peter. From one to two pints of blood may be taken from the veins, and normal salt solution injected, injecting one-third more of the salt solution than of drawn blood. The administration of chloral per rectum is generally adopted—from thirty to forty grains at a dose, repeating according to number of attacks.

Morphia is one of our best remedies. It does not weaken the patient, it does not injure the child, it has no effect on the kidneys, it controls the convulsions by allaying the irritability of the cerebro-spinal system. It prevents excess of waste products being thrown into the blood, and when the patient is under its influence, labor often commences and quickly terminates without causing more convulsions. Morphia can be given in 1-3 gr. at first and increasing to one grain if necessary. Chloroform inhalation is probably the best means of controlling convulsions. It should be given until the other remedies have

had time to take effect. As soon as a patient can swallow, four grains of calomel with six grains of bicarbonate of soda should be given, to be repeated in three hours and followed in four hours by some saline cathartic—epsom salts or rubinot or apenta water. Other purgatives, such as elaterium and croton oil may be used, and infusions of senna, with the sulphate of soda or of magnesia or normal salt solution, by the rectum are frequently employed.

The hypodermic use of veratrum veride, in doses of ten to twenty minims, is of great value. Dr. Jewett asserts that experience seems to justify the statement that no convulsions will occur while the patient is sufficiently under veratrum to hold the cardiac pulsations below sixty to the minute. If pulse is not sufficiently reduced by the first injection another should be given in half hour. Five minim doses at longer intervals are used to keep up this lessened frequency of the pulse.

Maygrier has reported the case of a primapara who had eighteen convulsions. She was treated by venesection, and then by a sound passed into the stomach through the nose. One hundred and fifty grams of milk were introduced every hour; dyspnea which was present, was almost immediately relieved and the patient recovered.

In every case where the urine is suppressed and scanty and dark colored, salt water should be used hypodermically to promote diuresis and thus eliminations. A liter of sterilized (temperature 88-90 degrees F.) warm water containing 7 to 7.5 grams of chloride of sodium is introduced into one of the buttocks, the skin having been first disinfected, and either a needle or a syphon employed; twenty minutes is required for the operation.

The professions agree generally that if eclampsia occurs in labor or labor comes on during it, delivery should be effected as soon as possible without violence. So, too, the majority agree that eclamptic attacks that do not yield to appropriate treatment, permit an induction for ending the pregnancy.

Benzoate of Guaiacol.*

MARK W. PEYSER, M. D., Richmond, Va., Assistant Physician to the Home for the Aged and Infirm, Secretary of the Richmond Academy of Medicine and Surgery, etc.

Four years ago, I read before the academy a paper giving a brief account of the properties of the benzoate of guaiacol (sometimes called benzoyl-guaiacol and benzosol), with reports of cases of bronchitis, pneumonia and tuberculosis satisfactorily treated by its means. Since that time, I have employed the remedy in a variety of conditions, the results, though not uniformly successful, being all that one could hope for in such an uncertain practice as medicine.

In a number of respiratory diseases, the salt is one that appears ideal, containing as it does, both guaiacol and benzoic acid. In cystic affections, the acid content is of excellent avail. In both of these classes we have the remote local action of the agent, an action which is too often neglected. The benzoate when swallowed, is decomposed in the intes-

*Read before the Richmond Academy of Medicine and Surgery February 25, 1902.

tines, chiefly the small, into benzoic acid and guaiacol, and, according to Butler, exerts a favorable influence in intestinal fermentation, auto-intoxication, diarrhea, etc. My experience in this direction has been limited, but agrees, so far, with the statement. I have had no experience with it in the treatment of diabetes, in which disease it is said to have been administered with good results.

There are certain advantages possessed by the benzoate over guaiacol and its carbonate, and creosote: it is almost tasteless and odorless, and while after the first few days of its administration there may be some objection, the patient soon becomes accustomed to it, and no longer rebels—not so with the other preparations. It contains, when pure, no cresols, which are present even in the purest guaiacol, and, therefore, it does not irritate the stomach nor cause burning and itching of the skin. The dose for an adult is from five to ten grains gradually increased, the maximum per day being forty grains; but the length of time required to produce the maximum effects is shorter than those of the other preparations. The remedy may be administered in capsules, powder or in suspension, either alone or in combination. Below is a further report of cases in which it was given:

Mrs. J. M. D.; cystitis. There had been several attacks at longer or shorter intervals, and various remedies had been used with more or less success, none, however, overcoming the inflammatory state entirely. Eight five grain capsules of the benzoate finally succeeded in doing so, since which time, so far as I know, there has been no other seizure.

C. H. E. Microscopic examination made by Dr. Greer Baughman, shows that this patient has myo-sarcoma of the bladder. When the urine becoming scalding and its passage agonizing, the administration of a few five-grain doses of the benzoate results in speedy relief.

F. W.; Prostatis. The pain and cystitis incident, readily succumb to a combination of five grains of benzosol and a fourth grain of codeine given at three hour intervals.

Mrs. C. L. P.; acute nephritis; first seen in the fourth day of illness. Owing to the intense pain in the back and lower abdomen, and whenever urine was voided, the remedy was prescribed in the combination just described. The following day, she reported much relief from pain and easy urination. Examination of the urine, three quarts of which she passed in the preceding twenty-four hours, showed 2 per cent. of albumin, a few casts and a large number of kidney cells. The medicine was continued, flannel underwear ordered and a strictly milk diet enjoined. The next day, the quantity of urine was two and a half quarts, albumin a little less than 1 per cent, kidney cells were much diminished and casts absent. On the fourth day of treatment, the quantity of urine was normal, and there was but a trace of albumin and very few cells. On the fifth day, albumin had disappeared entirely. Pain was not a factor in the case after the third day, when the codeine was discontinued. The patient is now taking the ammonio-acetate of iron.

R. D. and A. R. M., each aged 2 years. Acute bronchitis with temperatures respectively of 101 and 103

degrees. Benzoate of guaiacol suspended in syrup of amorphous quinine, was given every three hours. In twenty-four hours, all fever, cough and pain had disappeared. This is a fairly common result; indeed, in some cases of acute laryngitis, I have seen the cough cease almost entirely in twelve hours.

Mrs. J. H.; acute bronchitis. A hot mustard foot bath and a mustard plaster to the chest were ordered, and the combination of the benzosol and codeine were prescribed, the next day, pain having ceased, codeine was stopped, but the benzosol was conitnued for two days longer, when symptoms disappeared.

S. J., Jr.; acute lobar pneumonia. The benzoate was given suspended in syrup of quinine. In five days after the beginning of the disease, and three days after I had first seen him, the crisis ensued. The attack was short but sharp, and strychnine and atropine were employed coincidently. In one or two other cases, I have seen the crisis appear on the fifth day under the use of the benzoate.

Mrs. T. E. W. An attack of pneumonia and typhoid fever in March, 1899, left this patient frail and weak. The benzoate was given during the course of her illness, with excellent effect, and was continued for some time afterward. I saw no more of the patient professionally, till the 9th of January, this year, when she had a pulmonary hemorrhage. Suprarenal capsule checked this successfully. She was then given the benzoate of guaiacol, the use of which she has continued ever since. A day or two ago she informed me that she weighed more than ever before in her life, with the exception of the time she spent in the mountains after her first sickness. This patient is the only one in my experience, who has complained of eructations produced by the remedy.

With this account I shall conclude, desiring to say, however, that there were some cases in which the benzoate of guaiacol was of no avail; but the majority in this report was chosen at random, and from it my hearers may judge of the value of the agent. If they incline to use it, I trust their results will be as satisfactory as mine.

The Latest Development of Finsen's Light Treatment of Lupus.

Recent experiments made in the Finsen Institute with various metals instead of carbon electrodes have led to a most surprising discovery, namely, that iron gives a spectrum which is enormously rich in chemical rays, but almost devoid of heat rays. Utilizing this peculiarity of the spectrum of iron, a Finsen lamp has seen constructed, the electrodes of which are composed of hollow cylindrical pieces of iron, which are cooled by water circulating inside them. The light produced by the new lamp is very intense; within two minutes a bactericidal effect is produced as great as that produced by the old Finsen light within an hour. The experiments were arranged as follows: A continuous current of five amperes was employed for lighting the lamp, hollow iron electrodes with a central water-cooling arrangement being used. The electric pressure amounted to 40 volts; the distance between the object and the arc-light was 10 cm. (four inches). The light was *not*

collected with a lens. The test microbes were: Bacillus tuberculosis, B. typhi abdominalis, B. choleræ asiaticæ, streptococcus pyogenes aureus, bacterium coli communis and gonococcus. Gonococcus and tubercle bacilli were cultivated in 2 per cent. glycerin agar coated with sterilized blood, the other microbes in 15 per cent. nutrient gelatine. Figures are given showing the bactericidal power of the new lamp over the apparatus formerly used.—*Medical Record.*

Apropos of Osteopathy.

In a certain type of mind to which the occult appeals with great force is to be found the secret of the perennial vogue of the quack and the charlatan. The physician of to-day will be entertained and comforted if he will re-read a certain one of Dr. Oliver Wendell Holmes' medical essays in which the rise and fall of various popular delusions of other days are set forth. For the popularity of the latest wonder-cure, osteopathy, the medical profession has itself in no small degree to blame. A therapeutic measure of distinct value in selected cases has been so neglected by the profession generally that a charlatan seizes upon it and seeks to and in some localities succeeds in elevating it into a "school of practice." Surround such a therapeutic measure with a halo of mystery and you have a combination irresistable to the credulous mind. Many physicians are slow to get away from the idea that in drugs alone are found all valuable remedial agents. Medical schools are slow to incorporate in their curricula practical instructions in the use of therapeutic measures outside of materia medica. Mechano-therapy, electricity, hydrotherapy, suggestion, and of not less importance, diet, fresh air and exercise, should be remembered as belonging to the armamentarium of the physician, no less than iron, quinine and calomel. Nothing which relieves pain or prolongs life is outside the domain of medicine.—*Buffalo Medical Journal.*

One On the Doctor.

A very interesting case of medico-legal interest recently occurred in Cincinnati. Edwin Behymer, an electic, notified the health office that his child had "membranous croup." The health officials promptly placed on his house a diphtheria placard, which the doctor covered up. For this he was arrested. As he had denied that his grandchild had diphtheria, he was ordered to send some sputum to be examined. Wishing to play a trick on the officials, he sent some of his own sputum in which were found Klebs-Loeffler bacilli. He then tried to laugh at the health officer for his "mistake," telling him of the trick. In consequence the doctor himself was quarantined, because himself infected. The fight waxed warm. Damage suits and injunctions were thrown about recklessly, and the bacteriologists and clinicians in considerable numbers were called in for expert evidence. At last reports the health officer had been declared by the courts to have proper right to follow the course he had.—*The Cleveland Medical Journal.*

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THERAPEUTIC HINTS.

The Drug Treatment of Neurasthenia.

Dr. Daniel R. Brower, in an article in the *Internat. Med. Mag.*, states that neurasthenia is an autotoxic and exhaustional neurosis, and therefore requires first eliminants. To promote elimination by the bowel he recommends the following:

℞ Extracti aloes	gr. viii	52
Extracti taraxici	gr. xvi 1	06
Pulv. ipecacuanhæ.	gr. i	06
Ext. hyoscyami	gr. viii	52

M. Ft. capsule No. viii. Sig.: One at bedtime for the bowels.

He states that the dose of each of the foregoing ingredients should be regulated to suit the patient. According to his experience this pill acts as a stomachic tonic, a mild diuretic and as a laxative. In addition to this pill he recommends colonic flushings once or twice a week, using the high normal saline injection.

To increase the renal elimination the following is advised by him:

℞ Potassii citratis	ʒ v 18	75
Ext. adonis vern. flu	ʒ ss 1	90
Aq. aurantii	℥ iv 154	00

M. Sig.: One teaspoonful before each meal in hot water.

The exhaustional part of neurasthenia must be treated with alteratives and tonics. The following alterative is considered by him to be the most efficient:

℞ Auri et sodi chloridi	gr. ii	13
Pulv. resinæ guaiaci	gr. C. 6	50

M. Ft. capsuleæ No. xx. Sig.: One capsule one-half hour before each meal.

He insists upon repeated examinations of the blood in every case in order that the iron may be intelligently administered or withheld. He regards Blau's mass freshly prepared as the best form, prescribed as follows:

℞ Ferri sulph	gr. xl 2	66
Sodii carb	gr. xl 2	66
Ext. nucis vom	gr. iii	18
Sodii arsenatis	gr. i	06

M. Ft. cap. No. xx. Sig.: One capsule after each meal.

The author believes that nux vomica and its alkaloids do harm when given in large doses in the treatment of neurasthenia. When the hemoglobin has increased so that the administration of iron is no longer necessary, he recommends the use of phosphorus in the form of zinci phosphidum gr. 1 | 10 (.006), or calcii glycerophosphas gr. v. (30), or syrupus hypophosphiti U. S. P. ʒ i (3.75), to be given after meals.

For the nervous system as a sedative, the following is given:

℞ Sodii bromidi	ʒ vi 22	50
Essentiæ pepsini q. s. ad.	℥ iii 93	

M. Sig.: One teaspoonful in water as necessary.

He advises against the continuous use of nerve sedatives on account of the danger of inducing the drug habit. The insomnia, which is a stubbon symptom, should be combated without the use of drugs if possible; otherwise, the following combination containing chloral and sodium bromid may be used:

℞ Chloralis hydratis	ʒ iv 15	00
Sodii bromidi	ʒ iv 15	
Ext. glycyrrhizæ flu	ʒ ii 7	50
Aquæ q. s. ad	℥ ii 62	

M. Sig.: One teaspoonful in water at bedtime and repeat in one hour if necessary.

Jour. A. M. A.

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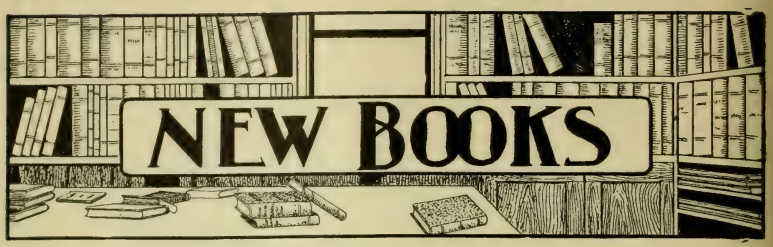

A Manual of Syphilis and the Venereal Diseases, by James Nevin Hyde, A. M., M. D., Professor of Skin, Genito-Urinary, and Venereal Diseases, Rush Medical College, Chicago; Dermatologist to the Presbyterian, Michael Reese and Augustana Hospitals, of Chicago; Consulting Dermatologist to the Chicago Hospital for Women and Children, and to the Chicago Orphan Asylum; and Frank Hugh Montgomery, M. D., Associate Professor of Skin, Genito-Urinary and Venereal Diseases, Rush Medical College, Chicago; Professor of Skin and Venereal Diseases, Chicago. Second edition, revised and enlarged, with 58 illustrations in the Text, and 19 full-page lithographic plates. Published by W. B. Saunders & Co., Philadelphia, 1900. Price net, $4.00.

This work represents the latest achievements of medical research in this branch of medicine. The authors have carefully gone over the first edition, and some sections, notably that of Gonorrhoea, have been entirely rewritten. The original work has furthermore been improved by the addition of numerous and excellent lithographic plates, taken from MacFarland's "Atlas of Syphilis and the Venereal Diseases." The authors have shown a disposition to avoid all controvertional points of a purely scientific character, and those subjects which the present state of our knowledge does not permit us to speak with certainty. The details of treatment, however, and of diagnosis have received careful attention. In this particular we cannot too highly recommend the work.

A Book of Detachable Diet Lists, for albuminuria, anaemia and debility, constipation, diabetes, diarrheoa, dyspepsia, fevers, gout or uric acid diathesis, obesity, tuberculosis, and a Sick-Room Dietary; compiled by Jerome B. Thomas, Jr., A. B., M. D., Instructor in Materia Medica, Long Island College Hospital; Assistant Bacteriologist to Hoagland Laboratory. Second Edition, revised. Published by W. B. Saunders, 1900. Price $1.25.

This compilation of detachable diet lists will be found of exceeding use to the practitioner, who can, by this means, and with a minimum expenditure of time and effort, regulate the diet of his patient, a matter often of greater moment than the strictly medical treatment. The list embraces practically the entire class of diseased

conditions in which diet is an essential, and can be easily changed to suit individual cases.

AMERICAN EDITION. NOTHNAGEL'S ENCYCLOPEDIA.

TYPHOID AND TYPHUS FEVERS.—By Dr. H. Cushmann, of Leipsig. Edited, with additions, by William Osler, M. D., Professor of the Principles and Practice of Medicine, Johns Hopkins University. Handsome octavo of 646 pages, illustrated, including a number of valuable temperature charts and two full-page colored plates. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, $5.00 net; sheep or half morocco, $6.00 net.

The original German edition of this volume is universally recognized as the standard authority on the subjects of which it treats. The American edition, however, even surpasses the German, for, besides containing all the material of the original, extensive additions have been made to almost every chapter, thus incorporating into the work the very latest views on the subjects under discussion.

The chapter on Bacteriology has been thoroughly revised and much new material added, giving prominent consideration to the distribution of the typhoid bacilli, especially in the urine, the rose-spots and the blood.

To the chapter on Pathology many minor additions have been made, incorporating the important work of Mallory. The literature on the localized lesions due to bacillus has been carefully reviewed and made to conform to the most recent advances in that part of the subject. Thayer's exhaustive study of the state of the blood has been utilized, and the surgical aspects of typhoid fever have been fully revised with the aid of Keen's monograph.

Much valuable material has been added to the chapter on Diagnosis by Bacteriologic Methods, particularly with reference to the recent work in blood-cultures and on the detection of bacilli in the urine.

The chapter on Perforation and Peritonitis has been practically rewritten, as has also the section on the Hepatic Complications of Typhoid.

Thus it will be seen that the American edition of this valuable work, while still possessing all the commendable qualities of the original German, is greatly enhanced in its field of usefulness by being brought strictly abreast of the latest literature on the subjects, and by representative specialists.

SAUNDERS' QUESTION COMPENDS.

ESSENTIALS OF PHYSIOLOGY.—Prepared especially for Students of Medicine; and arranged with questions following each chapter. By Sidney P. Budgett, M. D., Professor of Physiology, Medical Department of Washington University, St. Louis. 16 mo. volume of 233 pages, finely illustrated with many full-page half-tones. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, $1.00 net.

This is an entirely new work and a worthy accession to Saunders' excellent series of Question-Compends. It aims to furnish material with which students may lay a broad foundation for later amplification, and to

serve as an aid to an intelligent consultation of the more elaborate textbooks. The subject of Physiology is covered completely, and, the author of the work being a teacher of wide experience, the salient points are particularly emphasized. An important feature is the series of well-selected questions following each chapter, summarizing what has previously been read, and at the same time serving to fix the essential facts in the mind. Nearly all the illustrations are full-page half-tones, and have been selected with especial thought of the student's needs. In every way the work is all that could be desired as a student's aid.

SAUNDERS' MEDICAL HAND ATLASES.

ATLAS AND EPITOME OF OPTHALMOSCOPY AND OPTHALMOSCOPIC DIAGNOSIS.—By Prof. Dr. O. Haab, Director of the Eye Clinic in Zurich. From the third revised and enlarged German edition. Edited by Geo. E. de Schweinitz, Professor of Opthalmology, Jefferson Medical College, Philadelphia. With 152 colored lithographic illustrations and 85 pages of text. Philadelphia and London: W. B. Saunders & Co., 1901. Price, 3.00 net.

The great value of Prof. Haab's Atlas of Opthalmoscopy and Opthalmoloscopic Diagnosis has been fully established and entirely justifies an English translation of his latest edition. Not only is the student made acquainted with carefully prepared opthalmoscopic drawings done into well-executed lithographs of the most important founders charges, but in many instances, plates of the microscopic lesions are added, the whole furnishes a manual of the greatest possible service, not only to the beginner in opthalmic work, but to one who has already far advanced and desires to compare the observations of his own service with those of the rich clinic from which Prof. Haab has gathered his plates.

ATLAS AND EPITOME OF SPECIAL PATHOLOGIC HISTOLOGY.—By Docent Dr. Hermann Durck, of the Pathologic Institute of Munich. Edited by Ludvig Hektoen, M. D., Professor of Pathology in Rush Medical College, Chicago. Volume II. With 123 colored illustrations on 60 lithographic plates and 192 pages of text. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, $3.00 net.

This volume is a continuation of the one on special pathologic histology issued some months ago, and includes the liver, urinary organs, sexual organs, nervous system, skin, muscles and bones.

It is announced that Volume III., shortly to be issued, is to contain an exposition of general pathologic histology.

The illustrations in this, as in all of this series of hand-atlases, are superb, but in few of the subjects discussed are the possibilities so great for illustrattive treatment as this of pathology. The reproductions in the colored illustrations of the various stains of tissues are excellent, and are of great assistance to student and practitioner interested in this subject.

A feature to recommend the book is the attention to details, such as recording the connection between the changes recognizable microscopically

and the resulting microscopic appearances.

The book is beautiful and most useful.

OGDEN ON THE URINE.—Clinical Examination of the Urine and Urinary Diagnosis. A clinical guide for the use of practitioners and students of medicine and surgery. By J. Bergen Ogden, M. D., Instructor in Chemistry, Harvard Medical School. Handsome octavo, 416 pages, with 54 illustrations and a number of colored plates. Cloth, $3.00 net.

The design of this work, as stated by the author, is to present the chemistry of the urine and its relationship to physiological processes, with the most approved working methods, both qualitation and quantitation, and in addition to the diagnosis of diseased conditions of the kidneys and urinary passages. The advantages of this work lies in the fact that most books on urinalysis leave the physician to work out the diagnosis for himself, which often involves a lengthy search through various medical works. Here, however, the author takes up the question of urinary diagnosis in detail and applies the information found by chemic and microscopic examination of the urine. This is obviously of great advantage, particularly to the general practitioner.

Part I. of the book deals in detail with the various methods of chemical and microscopic examination of the urine; is profusely illustrated and enables the student or those deficient in technical knowledge of the subject to get accurate results.

In Part II. special attention has been paid to diagnosis, which includes our present knowledge of the character of the urine, the diagnosis and differential diagnosis of disturbances and diseases of the kidneys and urinary passages, whether they be local or general, medical or surgical; a brief enumeration of the prominent clinical symptoms of each disease; and, finally, the peculiarities of the urine in certain general diseases of the body.

The illustrations are unusually good and the mechanical features of the work merit unstinted praise.

MCFARLAND'S PATHOGENIC BACTERIA. Second Edition, Revised and greatly enlarged. Text-book upon the Pathogenic Bacteria. By Joseph McFarland, M. D., Professor of Pathology and Bacteriology in the Medico-Chirurgical College of Philadelphia, etc. Octavo volume of 497 pages, finely illustrated. Cloth, $2.50, net. W. B. Saunders & Co., Philadelphia, Pa.

The author very pertinently remarks, that in a work of this character it is exceedingly difficult to know what to leave out, and yet careful perusal will show that the omissions are such as would not properly come under the scope set by the author; nor indeed are they of any great practical importance. The immense mass of information that has accumulated upon this subject during recent years may well bewilder a writer who attempts to cover the essentials in a given space. Nevertheless, Dr. McFarland has treated the subject in a systematic way, and presents in an accurate and concise manner the essentials of bacteriology up to date.

This edition is a considerable in-

crease in size over the former, but the author has consistently adhered to his original plan of a work upon the pathogenic bacteria.

Heisler's Embryology.—A Text-Book of Embryology. By John C. Heisler, M. D., Professor of Anatomy in the Medico-Chirurgical College, Philadelphia. Second edition, thoroughly revised. Octavo volume of 405 pages; handsomely illustrated. Philadelphia and London: W. B. Saunders & Co., 1901. Cloth, $2.50 net.

This book is a striking illustration of the exact knowledge and minute research characteristic of the best scientific literature of to-day. That the author is a practical teacher can be seen from a glance at the text and illustrations. The perspicuity of his style is captivating and makes the reading, as well as the understanding thereof, easy.

Like all obscure and intricate subjects, the beauty and value of a knowledge of embryology becomes apparent only when set forth in such a way as to be readily understood. Take, for instance, the author's description and illustrations of the primitive heart and aortic arches, on page 149, *et sub,* and it is easy to understand how the right branch of the double primitive aorta might persist and the left branch close, thus causing a *transposition* of the central arterial system—an anomaly which without a knowledge of embryology is inexplicable. Embryology explains hypospadias and hair-lip and cleft-palate and dermoid-cysts and a thousand other defects to which the human body is heir.

Not only are the mysteries of the anomalies of the body revealed, but a study of embryology from the primitive cell to the mature organ, as presented in Dr. Heisler's book, gradually unfolds to an convinces the student, like invincible logic, the reasons for the form, structure and location of each individual organ.

Embryology, like its kindred subject histology, is an irrefutable argument, showing the wisdom and beneficence of the Creator.

Dr. Heisler's book is up-to-date in every particular. Proof of this assertion is abundant, for instance, the chapter on the Decidua and Placenta in which the previous views that ovum becomes emplanted *upon the surface* of the mucosa, is shown to be incorrect; but instead, *sinks into,* is embedded in, the mucosa. Plate IV., opposite page 86, shows this process beautifully. Indeed the illustrations are one of the finest features of the book.

The profession is to be congratulated that the author had put into our hands such an admirable and timely work. J. W. L.

Annual and Analytical Cyclopaedia of Practical Medicine.—By Charles E. de M. Sajous, M. D., and one hundred associate editors. Illustrated with chromolythographs, engravings and maps. Vol. VI. F. A. Davis & Co., Philadelphia, 1901.

This is the last volume of the present series of this excellent work. Thus completed, the work more than fulfills the promise of its editors, and is the most complete and useful work of the kind that has come to our notice. It is said, and truly, that many medical books become obsolete in a

few years. This will not be the case when they are augmented by the work before us, for by it all the subjects are brought up to date. At the end of this volume is presented a general index covering 110 closely printed, double-column pages.

CIVIL HISTORY OF THE GOVERNMENT OF THE CONFEDERATE STATES, with Some Personal Reminiscences, by J. L. M. Curry, LL. D., author of "Constitutional Government in Spain," "William Ewart Gladstone," "Establishment and Disestablishment in the United States," "The Southern States in Their Relations to the Constitution of the United States and the Resulting Union," "Thirty Years of the Peabody Education Fund," etc. 12mo. cloth, gilt top, uncut edges; price $1.25. B. F. Johnson Publishing Co., Richmond Va.

As the author well says in the opening chapter, while many volumes have recorded "the glorious deeds of captains" and the "endurance and gallantry of those who 'amid the weary waiting for help which never came' accomplished marvels of manhood and patriotism," the underlying principles and motives of secession "still lack understanding and approval."

These motives and principles Dr. Curry has here set forth in his own strong, convincing, inimitable way. It is not a dry record. To read it is like listening to a delightful monologue from the author's lips. The personal reminiscences and character sketches woven into the volume have a charm peculiarly their own, while the author talks of the origin of the Confederate government and its civil history in as delightful a vein as one would talk of art or literature.

INTERNATIONAL CLINICS.—A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and other topics of interest to Students and Practitioners by leading members of the medical profession throughout the world. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S. A. Volume III. Eleventh series, 1901. J. P. Lippincott Company, Philadelphia. Price, cloth, $2.00.

The October number of the International Clinics will be found most interesting to the profession, both on account of the wide scope covered and because of the high standing of the contributors to its pages. Therapeutics, medicine, neurology, surgery and diseases of the eye and throat have all been considered in the present volume, and each section deserves a far more extended notice than would be possible here. Of the more recent researches in therapeutics the article on Photo-Therapy after the Methods of Finsen, by Dr. Valdemar Bie, will atract marked attention. Dr. Finsen, by the way, has lately received the Noble prize of fifty thousand dollars.

The section on Medicine contains an article upon Convulsions of Infants and Children Under Three Years of Age, by Dr. John Abercrombie, Quite a number of pages

in this section is also devoted to a discussion of the diagnosis and treatment of various heart lesions, by recognized authorities upon the subject. The field of Neurology is ably covered by several valuable articles, including one by Arnold Pick. In the section devoted to Surgery will be found a most valuable series of articles upon appendicitis. We have purposely mentioned only a few of the many interesting topics which find a place in this volume, but the most casual inspection cannot fail to commend it to the physician, whatever his favorite branch of medical science.

Essentials of Obstetrics.—By Charles Jewett, A. M., M. D., Sc. D., Professor of Obstetrics and Gynecology in the Long Island College Hospital, and Obstetrician and Gynecologist to the Hospital, etc.; assisted by Harold F. Jewett, M. D. Illustrated. Octavo, cloth, 386 pages. Lea Bros. & Co., Philadelphia, Pa.

This volume is intended for the use of students, and presents the essential facts and principles of obstetrics in clear and precise style. Theoretical discussions and matters of historical interest are left to the more elaborate text-books. All that this volume contains is really essential to the practice of obstetria, and he who masters it well, may feel himself well prepared.

The International Medical Annual for 1902. Nearly 700 pages. By E. B. Treat & Co., New York. $3.00.

We cannot do better in describing this book than to quote as follows from the preface by the publishers, as it speaks of much that should be known regarding the volume:

Twenty years have passed since we first asked the profession to accept the "Medical Annual" as a help to them in their daily work. Its evolution since then, from a handbook of some 300 pages to one containing three times that number, does not represent so much the mere improvement of a book, as the increased demands of our readers for information.

The question has been put to us, why give details of an operation which only the specialist is called upon to perform? Our answer is, that the general practitioner of the present day wants to know these details. We find that readers practicing in remote country districts, and abroad, are our most severe critics if we do not supply information on the latest questions of medical science. This was not the case when we published our first issue, and this development of the "Annual" has only kept pace with the more widespread growth of general professional knowledge. The day has passed when we could reject subjects as being without interest to the "general practitioner," in contra-distinction to a minority who were supposed to take a deeper interest in medical science.

The "Medical Annual" renders it possible for all practitioners to keep themselves abreast with the times, and our large circulation is the best evidence that very many are determined to do. No effort on our part has ever been spared to make the book worthy of their acceptance, nor shall we depart from our settled

policy of giving due representation to conflicting views, with the same impartiality which has characterized our conduct of the work during the past twenty years.

The International Journal of Surgery Co., has a new book on press, "Regional Minor Surgery," by Geo. G. Van Schaick, M. D. Attending Surgeon to the French Hospital and St Vincent de Paul Orphan Asylum, New York. Containing about two hundred pages, and profusely illustrated with drawings especially made for this book. It is bound in cloth, and white leaf, printed on heavy book paper, and devoted to the treatment of surgical conditions that are met with in the daily practice of every physician.

This book is thoroughly practical and presents the subject in an interesting and instructive manner. Price, $1.50.

A Hero in Peace.—In a sketch of Admiral Kempff, who is about to return to this country after long foreign service, Mr. W. E. Griffis asks the Outlook: "Is the moral grandeur of a fighter, who for his country's sake refuses to fight, less than that of him who sinks an enemy's fleet?" Dr. Griffis explains and comments as follows:

A hero and patriot, who stood true to all our noblest traditions in the hour of temptation, when the highest judicial poise and practical wisdom were necessary, is Rear-Admiral Louis Kempff, a veteran of forty years' service. In command of the American naval forces in China on the night of June 16, 1900, he refused, because it was un-American,

University of Pennsylvania

Department of Medicine.

The 137th Annual Session will begin on the last Friday in September, 1902, at 12 m., and will end at Commencement, the third Wednesday in June.

The Curriculum is graded, and attendance upon four annual sessions is required.

Practical Instruction, including laboratory work, in Chemistry, Histology, Osteology, Bacteriology, Pathology, Physiology and Pharmacy, with bedside instruction in Medicine, Surgery, Gynæcology and Obstetrics, is a part of the regular course, and without additional expense.

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DR. JOHN MARSHALL, DEAN,

36th St. and Woodland Ave., Philadelphia.

to join the Russian, British, German, French, Italian, Austrian and Japanese allies in bombarding the Taku forts. Such an act wontanly declared war on China. It was not with the American a question of size or armament, for he had the Newark and the Monocacy, and of the 36 ships in the combined fleet, only eight small ships could and did operate. It was upon Kempff's wise and patriotic action that President McKinley and Secretary Hay could and did base their diplomatic action, the wisdom and propriety of which, amply vindicated before the world, have given the United States a leading position in China.

A New Book on Smallpox.—A very timely treatise on smallpox to sell at $3.00 is announced for publi-

cation early in April by J. B. Lippincott Company. It is written by Dr. George Henry Fox, Professor of Dermatology in the College of Physicians and Surgeons, New York City, with the collaboration of Drs. S. Dana Hubbard, Sigmond Pollitzer, and John H. Huddleston, all of whom are officials of the Health Department of New York City, and have had unusual opportunities for the study and treatment of this disease during the present epidemic.

The work is to be in atlas form, similar to Fox's Photographic Atlas of Skin Diseases published by the same house. A strong feature of the work will be its illustrations, reproduced from recent photographs, the major portion of which will be so colored as to give a very faithful representation of typical cases of variola in the successive stages of the disease, also unusual phases of variola, vaccinia, varicella and diseases with which smallpox is liable to be confounded. These illustrations number thirty-seven and will be grouped into ten colored plates, $9\frac{1}{2}$x$10\frac{1}{4}$ inches, and six black and white photographic plates.

The names of Dr. Fox and his associates assure the excellence of the work, in which will be described the symptoms, course of the disease, characteristic points of diagnosis, and most approved methods of treatment.

Yellow Fever Precautions.

To prevent the introduction of yellow fever into Havana, with its subsequent development and spread, an order has recently been issued by the military governor, as follows:

"All persons non-immune to yellow fever coming to the city of Havana from places infected with yellow fever shall report at such time and place as directed by the chief sanitary officer of the city of Havana. The chief sanitary officer shall be the judge as to immunity and infection, and shall serve proper notice upon all persons concerned. Violations of this order shall be punished by a fine of not less than $5 nor more than $50, United States currency, or by imprisonment of from one to ten days."

The provision of this order will enable the sanitary officer to keep all possibly infected strangers under observation during the yellow fever incubation period, and to take prompt measures to stamp out the infection should a case of this disease develop.

Concentration Camps in South Africa.

These camps are said to be now in a far better condition than they were a few weeks ago. The committee of women who went to South Africa at the instigation of the British Government for the purpose of making a careful investigation into the actual state of things prevailing in the camps, have reported that many former statements on the subject were greatly exaggerated; the death-rate among the children is still large, but the food is good and sufficient, the sanitary arrangements are as efficient as could be expected under the circumstances, and that, upon the whole, no grave cause of complaint can be brought against the authorities on the score of inhumanity or of neglect.—*Medical Record.*

Medical News and Items.

Dr. Lankford, a prominent physician of Wake Forest, died on April 5th, of appoplexy.

The North Carolina Medical College, of Davidson, N. C., has established a clinic in Charlotte for the benefit of its graduating class. This clinic is open for four hours daily, and is attended by the physicians of Charlotte.

Richmond, Va., is building a magnificent hospital to be known as the Memorial Hospital. It will be located near the Capitol building, and the Medical College of Virginia, in a locality known in former years as the Doctors' Commons, owing to the number of doctor's offices. The building will be complete in every detail and equipped with every known modern improvement.

The Medical Examining Board of North Carolina will meet in Wilmington on June 4th, and continue in session one week. It is desired that all applicants for license to practice will be present on the morning of June 4th.

J. Howell Way, M. D.,
Secretary of Board.
Waynesville, N. C.

The North Carolina State Medical Society will meet in Wilmington on June 10th, and we hope for a large attendance. This date is fully one month late to suit the doctors in central and western North Carolina, as many of them will be very busy from about May 25th all through June. Ileo-colitis and similar troubles are rampant at this date and doctors can ill afford to leave their practice. We appeal to the society in the interest of many of its members, and of the society itself, to hold its annual meetings during the first half of May.

The artist who originated the front cover of the March "Therapeutic Notes," which is devoted exclusively to excerpts concerning the products of Parke, Davis & Co., certainly did not lack originality, and a keen understanding of the harmony of colors, and the requirements that render a design both beautiful and seasonable. Budding pussy willows, old Boreas, blowing an angry blast, and two rams, emblematic of the signs of the zodiac, are combined in an artistic manner. Altogether the work is a credit to the Gotham lithographic firm that executed it. The contents of the publication are so replete with valuable hints that it merits preservation. Excellent half tones, illustrative of "How Serums are made," and a view of Parke, Davis & Co.'s new science laboratory lend additional interest to this issue.

Newer Materia Medica.

Selected Article.—A Contribution to the Therapeutics of Pepto-Mangan, "Gude."

By Dr. Ludwig Pohl, City Physician of Vienna, Austria.

It is about five years ago that I first had occasion to test Gude's Pepto-Mangan. The curative results obtained from its use were so surprisingly good that I determined to thoroughly experiment with this preparation on my abundant clinical material, the outcome of which is reported in this article.

The number of remedies introduced into the market every year are so numerous that for this reason alone it would be impossible to employ all of them, even if only experimentally, or to take a careful choice. Pepto-Mangan appealed to me strongly in the first instance for reasons that I shall explain. Although inclined to think well of this preparation from the first, I would remark that my observations were instituted without bias, and that my investigations were carried out in a strictly scientific manner.

I was led to make a thorough study of this preparation by the subjective statements of the patients that it never caused the least disturbances, the objective evidence of improvement, and besides these, by the following considerations.

According to the views of many authors, iron preparations, to be efficient, must exert not only a local, but distant, that is, general effect. In chlorosis and in many severe cases of anaemia chalybeates are said to remove the hydrogen sulphide, formed frequently in large amount in the aliementary tract, by the combination of the iron with the sulphur. This removal is necessary, because hydrogen sulphide, if present in too large quantity, renders impossible the absorption of the iron in the food by precipitating it in the form of sulphide of iron. It is known however, that not only iron but also manganese is adapted in a high degree in making up hydrogen sulphide. Manganese therefore acts as an auxiliary to iron in this respect.

Another circumstance was decisive for me. A large number, almost all, of the officinal ferruginous preparations are absorbed only to a slight extent when administered internally. This can be maintained on the ground of the fact that in animals and human beings positive evidence of the entrance of these preparations into the blood cannot be obtained in the persons experimented with have not intestinal catarrh or have not received excessive doses of iron. The more the preparation approximates to the form in which iron is contained in the food, the more likely it is to be absorbed. The pep-

tonizing of an iron preparation is therefore of decided advantage, as its absorbability and assimilability is thereby enhanced to a considerable degree. Aside from this, the peptone combination is adapted for exerting the systematic effect. This general action of iron preparations only takes place if after absorption they undergo conversion into hemoglobin. Hence this conversion is only possible in the case of preparations which contain iron in form of an organic combination. They will then act even when containing a much smaller percentage of absolute iron.

It was therefore the chemical constitution of the preparation which appealed to me, and which induced me to undertake extensive experiments.

The cases in which I employed Gude's Pepto-Mangan comprised chiefly the poorer class of people. I mention this particularly, because with these patients it is difficult or well nigh impossible to pay attention to the hygienic conditions or to consider the dietetic side of the treatment. Notwithstanding this, the results were favorable. Of course, they were most satisfactory in the case of those patients who were also able to carry out the hygienic and dietetic regulations.

Numerous cases of chlorosis, anaemia, neurasthenia and hysteria, as well as two cases of malarial cachexia, were submitted to careful and thorough observation.

In many cases determinations of the bodily weight, measurements of the blood pressure, estimates of the hemiglobin percentage and blood counts were made.

As regards the bodily weight, I observed in sluggish, obese, chlorotic patients a reduction in flesh as well as improvement of the general state. The high absorbing power of the preparation and its ready conversion into hemoglobin increases the oxygin capacity of the blood; pari passu with this there is an improvement of the metabolism, the oxidation, which takes place at the expense of the non-nitrogenous elements of the body, that is, the adipose tissue. In the case of lean persons I combine with this treatment rest in bed for several weeks, to which may be ascribed the increase of bodily weight observed.

There was a constant change in the conditions of blood pressure. In almost all the chlorotic patients the blood pressure, estimated by Basch's sphygmomanometer, because considerably higher. In many of my cases I noted improvements in the blood pressure of 40 to 60 millimeters in the course of four weeks. Besides this, the fluctuations of blood pressure, so frequently observed during changes of position. disappeared; the pulse frequently diminished considerably; and the subjective disturbances connected with the circulatory apparatus, especially the troublesome palpitation of the heart, subsided. I would remark that this amelioration occurred under the use of no other remedy in so short a time as under that of Gude's Pepto-Mangan.

In judging the value of an iron preparation, conclusive evidence is afforded by esitmates of hemoglobin and blood counts. To determine the hemoglobin I employed Fleisch's hemoglobinometer, and as a solvent

a 0.6 per cent. sodium chloride solution; for blood counts I made use of the apparatus of Thoma-Zeiss and a 2.5 per cent. solution of potassium bichromate for the red blood corpuscles; the white were not counted.

To demonstrate the changes in the hemoglobin and in the number of red corpuscles, I report here the history of a girl, 16 years old, affected with marked chlorosis. The disease was of almost two months' duration and attended with general functional disturbances. There were present mental anxiety, a disinclination to work, to enjoy life, or move about, marked muscular weakness, cardiac palpitation, difficulty in breathing, loss of appetite, headache, vertigo, restless sleep alternating with sleeplessness. The patient came from healthy parents, had always been previously healthy, and menstruated for the first time in her fifteenth year, but scantily and irregularly. Marked pallor of the skin and mucous membranes was noted; the lungs were normal. The area of cardiac dullness was enlarged toward the right side; blowing murmurs were heard all over the valves, and a bruit over the jugular vein. The radial artery was very small and soft; the pulse frequently 110. The spleen and liver were normal in size; there were no glandular swellings; the bones were not tender to pressure. The urine contained no abnormal constituents.

The percentage of hemoglobin in the blood was 35 per cent.; the number of red blood cells 2,700,000 to the cubic millimetre. The white cells were not increased; otherwise the condition of the blood was normal.

The treatment was as follows: The patient was advised to live on a mixed diet, with an abundance of fresh air and moderate out-door exercise. She also took three teaspoonfuls of Gude's Pepto-Mangan daily.

The increase of hemoglobin and of the number of red corpuscles is shown in the following:

	Hemoglobin.	Red Corpuscles.	
At the end of 1st week..	45 per cent.	3,260,000	
At the end of 2d week..	60 per cent.	4,100,000	To the Cubic
At the end of 3d week..	70 per cent.	4,500,000	Millimetre.
At the end of 4th week..	75 per cent.	4,900,000	

Before proceeding with the history of this case I would emphasize the fact that the number of red blood cells increased more than one and one-half million, while the increase of hemoglobin amounted to more than 100 per cent. Such marked improvement in the condition of the blood under the treatment with Gude's Pepto-Mangan was not unusual, but rather the rule in chlorosis. And it may be assumed with certainty that the above-described effect is attributable to the high absorbability of this preparation as compared with the numerous other chalybeates, and further, to the combined action of iron and mangan-

ese upon the blood-forming organs. I would add that numerous investigators, such as Hannan, Kugler and many others, have called attention to the important part played by manganese, both in the blood and as a hematogenic remedy.

In the case under consideration there was a perceptable improvement in the patient's subjective and objective state. The existing disturbances subsided gradually; the cardiac palpitation, loss of appetite, and sleeplessness disappeared, and after four week's treatment she was discharged cured.

It is not the purpose of this report to detail numerous histories of cases, and I shall content myself with briefly mentioning that I have treated more than 100 cases of chlorosis with Gude's Pepto-Mangan with as good results as those above described, except that in some instances the results did not appear as promptly. The fact cannot be sufficiently emphasized that during the entire course of treatment the remedy did not have to be discontinued on a single occasion, although this must be often done with other ferruginous preparations. I never heard a complaint that the preparation was not well tolerated; on the contrary the patients said they did not experience the slightest disturbance even during its prolonged use, and that it acted mildly, was well borne, caused no disturbance of digestion, but rather promoted the latter, and was free from any disagreeable taste.

I have previously mentioned that it may be positively assumed that Pepto-Mangan "Gude" stimulates the hematopoietic organs to increased activity. Numerous blood findings discovered casually by me, the appearance of the so-called immature forms of blood corpuscles, constrain me to take this view. Of much greater importance is the circumstance, however, that in numerous diseases of the blood occurring in connection with the lymphatic and blood-making organs I have derived excellent results from the use of Gude's Pepto-Mangan.

Decided amelioration in the leuchaemic state, arrest of the process in severe cases for a long time, reduction of the glandular swellings, improvement in the relation between red and white corpuscles, were noted by me in several cases under my care.

In my opinion, the value of ferruginous preparations in neurasthenia and hysteria has received too little consideration. The success of a rational therapy depends upon an effective application of all methods of treatment and remedies which enable us to combat the entire group of symptoms. An easily absorbable ferruginous preparation is of incontestable benefit, and I believe that Gude's Pepto-Mangan occupies a prominent place in this connection. It is not my intention here to institute comparisons with various iron preparations, but I would emphasize for the reasons already mentioned, and which are especially based upon the composition of Gude's Pepto-Mangan, that I prefer the latter preparation, and have employed it successfully in all conditions where it is necessary to improve the quality of the blood.

In conclusion, I would mention that I have obtained excellent results from Gude's Pepto-Mangan in

two cases of severe malarial cachexia. In the one case the treatment occupied three weeks, in the other five weeks. Both cases were cured. It is of interest that in the first case in which a malarial attack had not occurred for some time, a typical paroxysm, with rigor, fever and sweats developed. After one week's treatment the attack failed to recur, and for this reason I was unable to search for plasmodia. I am not disposed to overestimate this occurrence, nor to make it the subject of theoretical reflections. I am decidedly of the opinion, however, that this attack is attributable to an influence of Pepto-Mangan "Gude" upon the spleen.

In all particulars Gude's Pepto-Mangan is an excellent preparation, which bids fair to occupy a permanent place in the materia medica. I would be pleased if through this article I have directed attention to this valuable remedy, and incited others to undertake experiments and report their observations.—*Alabama Medical Journal.*

I have used your Sabalol Spray for the last five years, and most cordially recommend it as one of the most efficient and non-irritating antiseptic curative preparations that I have ever prescribed.

DR. J. M. BIGELOW.
Professor Diseases of the Nose and Throat in Albany Medical College.
Albany, N. Y.

Cough.

Cough is always a manifestation of irritation and must be traced to its source to be properly treated. If it is not relieved, we well know the irritation becomes greater, but the relief must not be at the expense of the digestive or cardio-vascular system.

The value of heroin in affections of the respiratory apparatus has been recognized by the profession since its introduction a few years ago. We have watched with interest the various preparations of this drug put upon the market, some to be condemned, some to be accepted for general use. What we need is a safe, efficient preparation, whose action is definite and positive. Such preparations are hard to obtain, but the combinations with glycerine are undoubtedly the best.

Glyco-Heroin (Smith) has recently come under our notice, and all who have used it, I think, will easily place it first among this class of preparations. A combination, as it is, of heroin with valuable expectorants and balsams, places it practically in a class by itself. Its formula is simple. Each drachm contains:

Heroin	$\frac{1}{15}$ grain
Ammonia hypophos.	.3 grains.
Hyoscyamus	.1 grain.
White pine bark	3½ grains.
Balsam tolu	¼ grain.
Glycerine q. s.	

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(Extract from paper by Chas. L. Ashley, M. D., in *Med. Rev. of Reviews,* Nov. 1900.)

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The Imitation Evil.

The manufacturers of valuable pharmaceutical products, compounds that have won for themselves an enviable reputation as remedial agents, have cause for congratulation on the recent victory gained by Messrs. M. J. Breitenbach & Company in a suit brought by them against Henry M. Thayer & Co., of Boston.

Messrs. Thayer & Co. have been *imitating* the wrapper and package of the now well-known Pepto-Mangan (Gude), and offering for sale in this imitation a preparation of iron and manganese. The court very properly

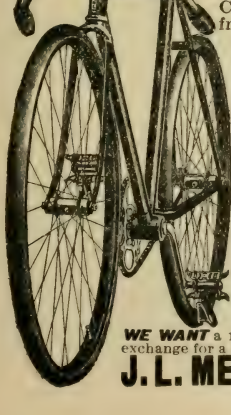
"Ordered, adjudged and decreed, that the defendant, Henry Thayer & Company, its directors, officers, agents and servants, be and they are hereby enjoined from making or using in any way, the terra cotta colored wrapper with white letters thereon, and the package in connection therewith, heretofore used by the defendant, for its preparation of iron and manganese, a specimen of which wrapper is annexed to the bill of complaint, or any other wrapper of package therewith which imi-

tates the wrapper used by the complainant, the M. J. Breitenbach Company for its Gude's Pepto-Mangan, and from selling or offering for sale any preparation of iron and manganese in any package or wrapper of a terra cotta color with white letters of the same style, shape and general arrangement as those of the aforesaid wrapper used by the plaintiff, the M. J. Breitenbach Company, and from using the words "Peptonate-Manganese" on or in connection with such terra cotta colored wrappers with white letters of the same style, shape and general arrangement.

"And the defendant is directed to forthwith deliver to the plaintiff or its attorneys, to be destroyed, all the terra cotta colored wrappers and packages aforesaid, which the defendant now has on hand or in stock or under its control in any way.

"And it is further ordered, adjudged and decreed, that the defendant, Henry Thayer & Company, account to the plaintiff, the M. J. Breitenbach Company for all profits which the said defendant has made from sales of said preparation in its said wrapper and package, and for all profits which the plaintiff would have made in the sales of its Gude's Pepto-Mangan but for the use made by the defendant of its wrapper and package, and also for the damages to the reputation and standing of the plaintiff's said preparation, known as Gude's Pepto-Mangan, by reason of the said use by the defendant of its said packages and wrappers, and of its preparation therein contained, and for the damages otherwise sustained by the plaintiff by reason of the matters charged in the complaint."

By this decision "the imitation evil" has received a merited rebuke, and the reputable manufacturers have gained a victory having a far-reaching effect, as by it is established a precedent in their favor, namely: The right as to their style of package. We congratulate Messrs. M. J. Breitenbach Co., on their victory.



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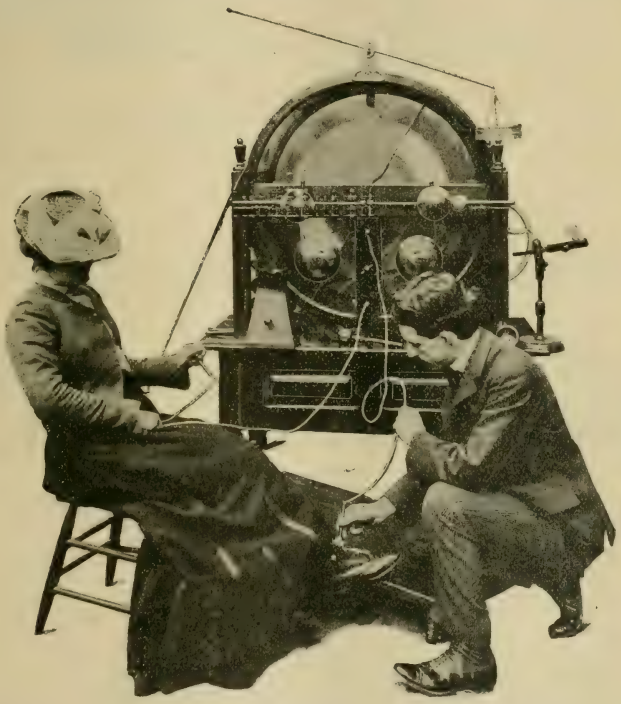

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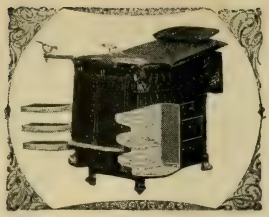

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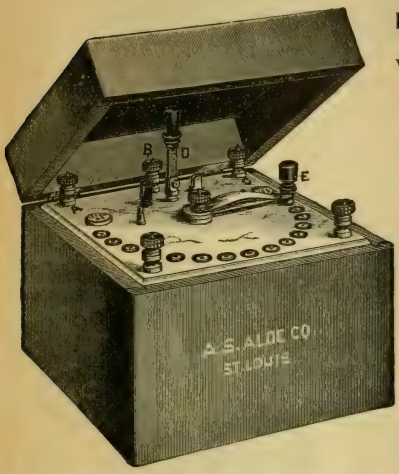

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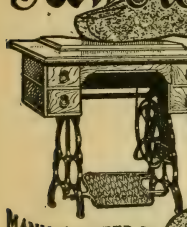

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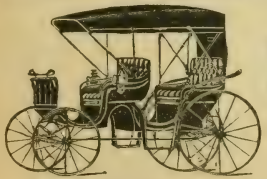

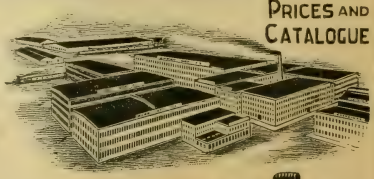

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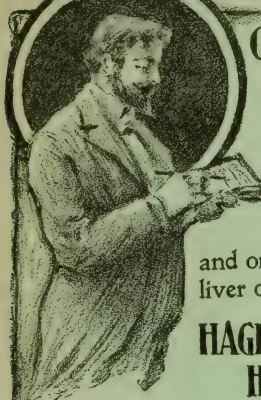

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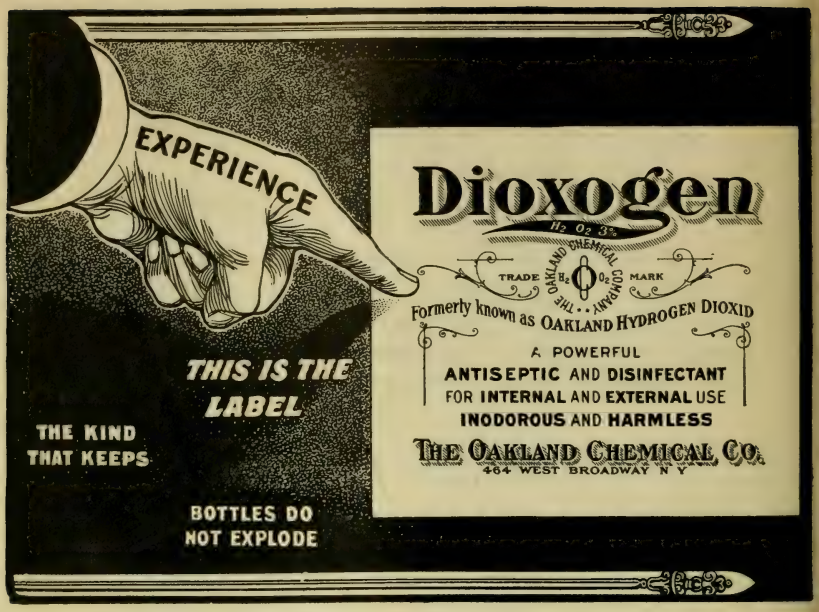

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A Monthly Journal of Medicine and Surgery.

VOL. XLVIII. CHARLOTTE, N. C., MAY, 1902. No. 5.

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EDITORIAL.

STATE BOARD EXAMINATIONS.

There has been much controversy in some quarters over the advisability of reciprocity in the matter of State licenses, but so different are the laws in the several States governing issue of license to applicants, that the difficulties in the way of adopting a uniform rule of practice in recognizing the certificates of the several examining bodies, that the question is as yet far from a satisfactory settlement. It is to be regretted that such want of uniformity in standard exists, as in common courtesy, as well as a matter of good policy, an agreement of some sort should be reached. The chances of an arrangement of this kind, however, seem remote, unless it could be done by a national enactment.

From an exchange we learn that the State board of dental examiners in Oregon, recently passed at their last examination only one out of ten applicants who came before them.

When we examine the kind of questions propounded by the board, we are not surprised at this surprising decimation of prospective dentists in that State. Perhaps the board considered the profession in that locality already too numerous to exist upon the available pabulum, and took this means of self-preservation. At any rate the measures were very effective. The chief cause of failure to pass the examination was due to the questions on chemistry. Here is a sample: "Name the rare dyad metals: give their symbols, atonic weights, specific gravity and fusing points?"

Beyond demonstrating the existance of a Chinese memory in some individual of the seekers for license, it is highly difficult to see what qualifications for the practice of dentistry a successful answer to such an interrogation would imply. We are not acquainted with any professional chemist, much less a student of medicine or dentistry capable of answer-

ing it off hand, and our opinion of his mental qualities would not be especially augmented if he did.

Apropos of this, the *Philadelphia Medical Journal* makes some highly sensible criticisms of the average examining board.

"This incident is but one of too frequent misuse of the opportunities of State examiners. Such boards, either under the provisions of law or by custom, are apt to be made up largely, often wholly, of persons not actively engaged in teaching or even familiar with teaching methods and their questions are too often drawn from text books or based upon the recollection of professional studies many years before, without taking into consideration the changes which sciences and the method of teaching have undergone. It is these circumstances that bring forth such a question as "give a test for strychnine" (without naming the conditions under which the test is to be applied) or question upon melting or boiling point or specific gravity, none of these data being proper objects of memory for the dentist or doctor.

"The fact is, examinations in physiology, chemistry, histology, bacteriology and materia medica should not be included in the list of State examinations. These branches are part of the preparatory work of the medical course, and all that is needed is a moderate scrutiny of the college methods to ascertain that the work is being done in its proper place. The State examinations should be limited to pathology, surgery, gynecology, obstetrics, practice and hygiene. This limitation would give opportunity for more thorough examinations in these branches than is now practicable and permit even some practical exercises. If it be thought necessary to continue the examinations in the theoretic branches, such examinations should take place just after the close of the study of them and not after the candidate has been at least two years engaged in other lines."

LONGEVITY AND THE PHYSICIAN.

The mortuary statistics of life insurance companies place physicians low on the list as regards longevity. There are perhaps many reasons why this should be so, since the arduous nature of his calling is generally acknowledged. Besides the physical work, and under many circumstances this is excessive, there is a burden of responsibility and a wear and tear on the sensibilities that undoubtedly tends in certain susceptable organizations to an early break-down and unfortunately, in not a few instances leads its voteries to resort to stimulants or narcotics. In men who have passed the meridian of life the irregularities and harassments of a general practice, added to the unnatural stimulus of sharp competition (for many middle-aged physicians are as jealous of their clientele as though they were beginners), must necessarily do something to shorten the latter years of life, as they certainly destroy its comforts and leisure. Still the medical profession has had and has now, many conspicuous examples of longevity, which will readily occur to the reader. It would seem that foreign medical men more frequently reach the age limit than do Americans, which only indicates that we suffer from the prevailing national vice of leading

too strenuous an existance. The oldest practicing physician in the United States is said to be Dr. O. R. Skinner, of Freehold, N. J., who is in his 93rd year. He was a surgeon in the civil war. He is kept quite busy with his professional duties and answers promptly all calls. His long life is probably due in part to the fact that most of it was passed prior to the general use of the telephone. His chances now would hardly be so good.

What the American Medical Association Asks of the State Societies.

The following resolutions, among others, recommended by the committee on reorganization were adopted at the last meeting of the American Medical Association:

c. That the State societies unitedly agree to federate themselves in the American Medical Association, and, as a preliminary to this, adopt a uniform organic law in regard to certain fundamental principles, viz.: to divide their annual sessions into two branches, legislative and scientific; the legislative branch to be as small as is compatable with representation from all the county societies, and to be composed of delegates elected by the county societies.

d. That membership in the county or district societies shall constitute membership in the respective State society without further dues, and that no one be admitted to membership in the State society except through county or regular district societies.

e. That funds to meet the expenses of the State society be raised by a per capita assessment on the county and district societies.

f. That a united effort be made to influence special societies to limit their membership to those who support the regular organization, and the semi-national and miscellaneous societies to encourage systematic organization, by covering a definite territory and also by limiting their membership to supporters of the regular organization.

g. That each State society create a permanent committee and a fund for the purpose of enforcing all medical laws in every part of its territory.

h. That each State society cooperate with the American Medical Association and with the other State societies in solving the problems now before the profession relating to medical education, medical legislation, reciprocity, licensing, etc.

An analysis of these resolutions shows that the American Medical Association requests the following:

1. The federation of all the State associations in the American Medical Association.

2. That all associations adopt a uniform plan of organization as regards certain fundamental principles.

3. That each State association have two distinct branches, legislative and scientific.

4. That the legislative branch be as small as compatible with representation from all county societies in the State or territory, and to be composed of delegates elected by the county (or district) societies.

5. That the scientific branch be composed of and open to all members of county (or district) societies, or as stated in the resolution: "Membership in the county or district society shall constitute membership in

the respective State societies without further dues, and that no one be admitted to membership in the State society except through county or regular district societies."—*Journal of American Medical Association.*

Concerning the Hypnotic Action of Apomorphine Hydrochlorate in Alcoholism.

W. Coleman and J. M. Polk (*American Medicine,* March 8, 1902,) draw the following conclusions in regard to the hypnotic action of apomorphine hydrochlorate in alcoholism:

1. To obtain a hypnotic action with apomorphine it should be given hypodermically.

2. The dose cannot be fixed. It is best to begin with a small dose—1-30 grain or less—and to repeat this or give a slightly larger dose within a short time. Further doses should not be given after vomiting occurs, until several hours have passed.

3. Doses repeated in two or three hours have but little beneficial effect.

4. The administration of apomorphine should not be repeated in patients who are weak.

5. The duration of the hypnotic action is only a few hours, and when the patient awakes his condition is practically unchanged, except in "ordinary drunks."

6. The best results are obtained from apomorphine when it is followed in two or three hours by some recognized hypnotic, as bromide, chloral, paraldehyde, etc.

7. Solutions of apomorphine are unstable, and should be freshly made for use. Old solutions should never be used.

8. Apomorphine may be employed as a hypnotic in selected cases of alcoholism. The best results are obtained in "ordinary drunks" and in cases verging on delirium tremens. But in some of these cases the drug has no effect whatever.

The administration of apomorphine to patients in delirium tremens is, in the writer's experience, without beneficial result, and may even be attended with danger from the depressing action.

The above analysis represents in the main the results obtained with apomorphine in all the 300 patients presenting alcoholism to whom the drug was administered.—*Medical Age.*

A Case of Tuberculosis of the Skin Following Accidental Inoculation With the Bovine Tubercle Bacillus.

Mazijck P. Ravenal reports the case of a physician who, while performing autopsies on two cows which were the subjects of experimental tuberculosis, slightly wounded the flexor surface of his wrist. The wound was merely washed in water and healed promptly. Four weeks later, the scar was seen to be red, prominent, and sensitive; it increased in size rapidly, and about two weeks later there was a nodule 15 mm. long by 8 mm. wide. This was removed, and with a portion of it two guinea-pigs were inoculated subcutaneously, and both developed generalized tuberculosis. Another portion of the nodule was examined microscopically, and showed a large number of giant cells and tubercle bacilli.—*University of Pennsylvania Medical Bulletin.*

The Carolina Medical Journal.

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Why Not Forestall Tuberculosis and Blot It From the Face of the Earth.*

By Jas. A. Burroughs, M. D., Asheville, N. C.

Modern sanitary laws enforced by municipalities and nationalities have partially throttled certain contagious and infectious diseases and increased longevity 16 per cent. within the last generation.

Vaccination was practiced more than one hundred years ago, but smallpox was not rigidly quarantined until later, and now it is to be observed that through vaccination and intelligent quarantine the disease is so robbed of its horrors, that it no longer strikes terror to a community.

By rigid quarantine of diphtheria and prompt administration of diphtheritic antitoxin, this once dreaded disease has become a subject of vigilance and not of fear.

The investigations of the cause of yellow fever by Walter Reed, of the United States Army at Havana, during the past two years have been so thorough and convincing of the one real source of infection, that never again will the United States or any other progressive country, with a well organized board of health, experience an epidemic.

Scientific investigation has set the trap and scattered the poison for the rat with a strict quarantine of every suspected case of the plague and has forever prohibited the disease again establishing a hold in any quarter.

By intelligent quarantine of scarlet fever, whooping cough and measles,

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followed by thorough formalin fumigation, these diseases are limited to circumscribed localities, yes limited to a single person in a single room in a building with many rooms, or dormitories, with many persons of a susceptible age.

In the year 1899, approximate mortuary statistics of the United States of America was 1,900,000. Pulmonary tuberculosis was responsible for 246,000 deaths, or approximately 13 per cent. of all deaths were due to pulmonary tuberculosis. The mortuary statistics of the United States possibly strike a fair average with other countries, except that of Germany, where in the same year 25 per cent. of all deaths in that country were attributed to tuberculosis. Insurance statistics of companies issuing policies against sickness in Germany for the year 1899 show 42 per cent. of the laboring class tubercular. These facts or statistics are so stupendous and startling that the average mind fails to grasp the cold, thin clammy situation of this unfortunate multitude.

We should pause and think; practically no man is born tubercular; every one who has tuberculosis has contracted the disease and, in every instance, it could have been forestalled and prevented. For just 20 years we have known the tubercle bacillus, and year by year we have learned its habits and various modes of entering the human system, consuming and extinguishing the life of that which is made in God's own image.

No problem before us at present compares in gravity and magnitude, not only to this generation, but to those who come after us, as to the wisest disposal of the consumptive. The great question is of two-fold significance: First: How can we best care for the patient; Second: How can we prevent the spread of the disease?

How can we best care for a consumptive? To place him in the most favorable condition for an arrest or cure and, at the same time, prevent a spread of infection, allows of much latitude for debate, but at best, narrows down to a few cold facts. Education of the laity, suitable legislation and a hearty co-operation of each medical man in the land.

Tuberculosis annually causes more deaths than any other two diseases combined. It is an insiduous disease, unlike acute infectious troubles, and the public has learned to look upon consumption as something that has always been with us, and accepts the situation as a matter that cannot be prevented.

How to educate the masses out of this state of lethargy is a question that should be begun under the head of hygiene in our public schools. Small children should be taught that tuberculosis is contagious so as to avoid infection from an afflicted parent, teacher or schoolmate. These children should be taught that in the sputum lies millions of germs, ready to infect any subject with a poor resisting power caused by heredity, mal-nutrition or any other cause.

Public schools everywhere should have a course on public hygiene with special reference to obliterating tuberculosis. This course should include the poor resisting power of children born of tubercular parents, or born of healthy parents with systems that have deteriorated, because

of environments, lack of proper food, clothing or habits.

Too much attention can not be given to modern sanitary living quarters with adequate room for an abundance of pure fresh air and sunshine; at the same time devitalized air should be taught as one of the potent causes of tuberculosis. There are many things to be included in this little course of hygiene or young war against tuberculosis which has received no attention here but may be brought out in the discussion.

I know of no other way to reach the masses on this or any other subject of such vital importance, as starting at the fountain head with the little ones who in half a generation will have the custodianship of all nations.

We must all acknowledge that the contagion or infection of any disease must be implanted in the minds of a community before a moral support is given a health board to stamp out a disease. It is when boards of health have good laws to prevent the spread of tuberculosis and these boards of health are "scotched" by the medical profession, upheld by a people who have been taught the nature of tuberculosis with its various modes of infection, etc., and the means by which it can be controlled, that we expect to see the disease practically abolished from mortuary certificates.

The public mind of America, as well as that of Europe is becoming aroused as to the ravages of tuberculosis and, at the same time, as to its prevention and curability. Much unwise legislation has been proposed from erratic, impulsive sources, for instance, the "Immigrant Exclusion Act of the Tubercular." Some States have introduced bills to prevent the introduction of the tubercular; even a few villages have passed ordinances prohibiting the tubercular from entering their gates. Such legislation is worthless because it is impracticable and will ever remain dead upon the statutes. Notwithstanding some mistakes have been made along this line, much good has already been accomplished. The civilized world is enlightened as to the great danger that lurks in the consumptive's sputum. (Various pocket flasks and hand cuspidores have been devised for receptacles of sputum; minute details are given each individual as to collecting and destroying same by all intelligent physicians.)

Four fifths of the citites of the United States have passed ordinances prohibiting spitting on the sidewalks, floors of street cars and public buildings. Asheville, N. C., in 1894, was the first town in the United States to pass such an ordinance. Dr. Trudeau at Saranac Lake very shortly followed suit and it soon became contagious. Many hundred copies of our ordinance have been sent to city attorneys throughout the country, by request. The ordinance has been well observed here. No man can visit our principal cities to-day and compare hotel lobbies, street car floors and sidewalks with six or eight years ago without being impressed with a change for the better.

Municipalities are discussing, on every hand, the disposition of their consumptive poor; in many instances homes have been established exclusively for the tubercular. Massachusetts and New York have already made contributions and established

State institutions for consumptives; other States are formulating plans along the same line; it is entirely logical and but reasonable to expect every city and State in the Union to adopt some practical means for the care of the consumptive pauper and to prevent him from infecting others.

The Sanatoria idea has taken possession of Italy, Germany, and, I may say, all of Europe. As yet the Sanatoria capacity is so out of proportion to the number of consumptives in those countries that it offers but slight protection; besides, it has yet to be proven by any kind of statistics that this is best for the inmates. At best, this plan can only offer protection in ratio to the Sanatoria capacity.

The tenement house question has been well discussed by Knopf and others, and, in a few instances, has brought about some legislation as to capacity and ventilation of apartments. Many cities have taken up the milk and meat supply with a view to eliminating tubercular food products. Many States and nationalities have laws providing for disposal of tubercular stock. Many other legislative steps have already been taken against this, the great foe of the human race.

An International Congress of Tuberculosis has been formed and it is from this international body that the world may expect, in a reasonable time, some formulated plans whereby this disease may be controlled.

An international prophylaxis of tuberculosis is eminently necessary, and suitable international regulations or laws must and will be enacted to combat this disease, as has been with cholera, the plague and yellow fever.

In the meantime, while we are waiting for action of our International Congress to formulate laws, let each nationality, State, city and parish meet the question squarely with suitable care for this class. In this country it is a debatable question as to national, State, municipal or county supervision. Very few States possess suitable climatic points for this class. National consumptives parks, consisting of small farms and truck gardens with many tents and inexpensive cottages, located in a dry climate at a suitable altitude, seems to be the reasonable solution. In this way the chief focuses of infection will be removed from the country and placed in a most advantageous position for a recovery. At the same time it is to be noted that sputum in a high, dry, sunny climate is practically sterile as soon as dry, so these parks would not become infectious or pestiferous localities from long habitation.

In this connection I cannot refrain from suggesting something along the same line for the prospective consumptives; poor children born of tubercular parents with bad lymphatic systems and reared in an atmosphere loaded with moisture and superabundance of bacteria, and who have improper, scant food, are as certain to become tubercular as time rolls on unless environments are altered. It is for this class, who are very numerous, that so much good may be accomplished by a change of environments and by giving them good food and plenty of fresh air.

A national supervision would be most admirable, but is probably impracticable; a country supervision is entirely feasible. It is the poor that needs government protection; the

well-to-do and rich have largely ceased to raise tubercular offspring. The trouble is forestalled by the child being placed in the best climate with good food, etc., to grow up into a healthy citizen.

The medical world is aroused upon the subject as is evidenced by a continuous stream of literature from all quarters of the globe.

Something has already been accomplished in lessening the number of deaths in the country. The mortuary certificates of five of our largest cities for 1900 show a decrease of 36 per cent. from tuberculosis over 1890; this intimates that the trouble is not only being prevented to a degree but is being handled in a more intelligent manner than ever.

With a course in public schools on hygiene with special reference to tuberculosis, in fifteen years we will have a voting population who will endorse any suggestion from the International Congress of Tuberculosis. This is a young subject, yet vigorous; some of the best brains of the world are devoting their energies to the prevention of the trouble.

While waiting for the educated hoard, international, national and State laws, let each physician be true to his clinician by keeping the young from becoming tubercular by knowledge which is in the possession of all; at the same time placing those who are already tubercular in a suitable climate in competent hands and fumigating behind them.

If we can and do utilize the knowledge that is in our possession, we will be able to largely forestall tuberculosis and so reduce the death rate from this cause that longevity may be increased several per cent.

Some Remarks on Cataract—Experience Gleaned From Over Five Hundred Cases.*

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Cataract is a subject which among specialists would apparently need no remarks, as it is presumed that there is hardly any better known or better investigated subject. Still I have never heard the subject opened in a gathering of oculists that it did not awaken the liveliest discussion and invariably bring out something new in the way of handling these cases.

In a mixed gathering of medical men, however, I know of no more pertinent topic. As you well know, it is exceedingly common. There are few practitioners who do not meet cases of cataract, whether among their well-to-do or poorer practice makes no difference, and meeting it as often as they do, they should have just as accurate information in regard to its proper diagnosis as they have in regard to tuberculosis. They are analogous only in that in one case the eyesight is at stake, and in the other, life is at stake. An error in the diagnosis of either in the earlier stages may result in hopeless blindness or in death. For cataract must not be confounded with other eye troubles, the early treatment of which would save the eye, any more than tuberculosis should be overlooked in

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the stage that is amenable to treatment.

Cataract is frequently confounded with glaucoma. This is a common mistake. It is also confounded with commencing amblyopias, whether due to retinal or optic nerve troubles. Now it does not require an expert opthalmic surgeon to avoid making this mistake. All that is necessary is for the medical man to give the same thoughtful care to the diagnosis in eye troubles as he gives in the diagnosis of lung and kidney troubles.

This is especially and particularly so in regard to the gentlemen who practice in the country, for, as a rule, they have to be more self-reliant than the city doctors. They have no one around the corner to settle a disputed question of diagnosis for them, and, therefore, they cannot neglect to acquire the information necessary to lead them to a correct conclusion in these cases, as the city doctor can. He is obliged to shoulder the responsibility which the city doctor shirks, and shirks with impunity. He cannot always do as the latter does, take his patients to somebody else as soon as he finds his trouble. This he can do with people of ample means, but the majority of cases do not want to be taken away for the mere diagnosis of their trouble, as they expect their doctor to do that for them.

An error in diagnosis often proves most disastrous. If it is cataract that is beginning to lower the vision, all well and good. No harm is done. But if it is not cataract, if it is chronic glaucoma, whether simple or inflammatory, if it is trouble of the retina, or of the optic nerve, the waiting for the period of blindness, which must be done in cataract before the operation is performed, means simply that the patient has lost all the time when treatment could have been of any avail, and only reaches the opthalmic surgeon when such damage has been done to the vision that no skill on earth can help such cases.

Now, it is well for us to bear in mind the grave importance of delay in these cases, and the grave responsibility we assume if we confound them with commencing cataract. Many of the amblyopias, in the early stage, rapidly recover under the proper treatment. Most cases of glaucoma, when recognized in time, can have the sight saved by surgical intervention. Can you not see, therefore, how important it is to be able to differentiate cataract from these other troubles?

You have no idea how often oculists have patients sent to them with a letter from the attending physician stating that the patient has been gradually getting blind from cataract for some months, and they have advised him to wait until the eye was blind so that he could be operated upon. Occasionally, they are advised to wait until both eyes are blind, and on examination the oculist finds that atrophy of the retina or the opitc nerve, or both, or cupping of the optic nerve with increased tension, occasionally, in the latter cases, with cataract complicating the other diseases, and secondary to them.

Now how are we to distinguish without an opthalmoscope commencing cataract from these other troubles? Sometimes this is very difficult, at other times it is easy. You can always see by a careful external examination with a good light

and a lens, such as nearly all doctors carry for the examination of the skin, the condition of the cornea, the iris and the opening in front of the iris, or the pupil. Now the condition of these parts borne in mind would help us a great deal in coming to a conclusion. In *cataract* the conjunctiva, cornea and iris are normal, and vision is usually better in a modified light, (in nuclear cataract this is always so, as the opacity is in the centre of the lens and requires the dilatation of the pupil that comes i na modified light, in cortical cataract, however, when the opacity is at the periphery this does not apply). is constant throughout the day, and the *tension* is always the same. The pupil is not dilated, acts perfectly under the light stimulation, but gradually becomes cloudy or grayish instead of black. In *glaucoma,* the conjuctiva is generally somewhat injected, especially around the cornea, the cornea itself is somewhat clouded at times, and the pupil is dilated more or less, and re-acts sluggishly, the vision varies during the day, being better sometimes than at others, and the tension also varies, being increased at times. In *amblyopia* the vision steadily decreases as in cataract, and is always best in a bright light, as plenty of light is required to stimulate the paretic optic nerve fibres.

Later on, the points of difference become more marked. In cataract the pupil becomes more clouded, usually of a grayish hue, but still has normal action. In glaucoma it may be greenish in color, but is dilated, whilst in amblyopia it is black as in normal eyes (hence the Germans call these troubles graue starr, gray cataract; greuner starr, glaucoma; and schwartzer starr or black cataract). In glaucoma the eye becomes more injected, the anterior chamber shallow, the variations in vision more marked and the tension more pronounced. In cataract and amblyopia there is no injection of the eye, and there is no alteration of tension, the loss of vision is gradual in both, but in most cases of cataract it is better in the shade, and in amblyopia it is best in the sunshine. *Pain is never present in uncomplicated cataract,* rarely in amblyopia, and nearly always in glaucoma at one time or another.

As treatment should be instituted as soon as possible in optic nerve troubles and in glaucoma if we are to get any result, we cannot take too great care not to confound them with cataract. When in doubt it is better to get the opinion of a specialist as soon as this can be done. Whilst if it is commencing cataract, the patient has been put to an apparently useless expense, still the diagnosis is settled and the doubt about the form of the trouble removed. Whereas, if it is one of the diseases mentioned, there is a chance of saving sight that would be irretrievably lost by waiting.

Having determined that it is cataract, the question arises *when* should it be operated on. I would say, just as soon as the eye is blind enough, with a dilated pupil, to merely count fingers. *Perfect blindness never occurs in simple, uncomplicated cataract.* A cataract never shuts out the perception of light. When this has occurred an operation would be useless. The removal of the cataract

would not restore vision, and, therefore, should not be done.

Patients are very often so anxious to have their sight restored that they are very apt to mislead a physician if he is not very careful. They will often say I can count my fingers, but I cannot see anything else. Of course, anybody can count his own fingers, and you will very often find that cases that make this claim cannot only not count your fingers when held between them and the light, but cannot tell that you are passing your hand in front of their eyes, and sometimes, cannot even tell that a strong light has been thrown upon the eyeball. I have often had cases sent to me who have unwittingly deceived the doctor in regard to this matter, and I was obliged to send them home without doing anything for them. *As long as there is perception of light there is a chance of restoring some sight, but good vision is never obtained by a cataract operation unless there is a very good perception of light in all parts of the field.*

How long does it take a cataract to mature? This is very variable. In some cases it is very rapid, a few months only, in others it requires as many years, and in some few it never becomes what we call entirely ripe, i. e., with opacification of the entire lens. Some cataracts reach a certain stage that may deprive the patient of useful vision and never make them blind. Such cases should be operated on without waiting for the period of blindness. Some cases of slow development may be hurried to maturity artificially, if the patient is under sixty years of age. Various methods of artificial ripening have been suggested, but the one most free from risk, and equally efficacious as any of the others is the one I advocated some years since in the *Annals of Opthalmology,* in 1892. Wide dilation of the pupil by mydriatics, tapping the anterior chamber and evacuating all the aqueous humor so as to bring the lens into contact with the cornea, and then triturating the lens through the cornea, has proved very successful in my hands, and shortened the period of tedious waiting. I have known a single trituration to bring about complete opacification in two or three weeks. In other cases it is slower, and in some the operation must be repeated. The only risk is iritis, but if the pupil is kept widely dilated the risk is reduced to a minimum.

When it has been determined that a case is a fit one for operation, the condition of the other parts of the eye should be thoroughly inspected before attempting the extraction. It sometimes happens that there may be conjunctivitis with increased secretion, or there may be an apparently increased flow of tears over the lid, due to malposition of the puncta, the entrances to the tear sac, or there may be trouble in the tear sac itself with secretion present. It is very important that such troubles should be corrected before an operation is attempted, as otherwise we might have the wound infected by the secretion from the conjunctiva or the tear sac, and the eye will be lost in consequence of failing to put it in proper condition. This is a very important matter and should never be overlooked.

Granted that the eye is in a good condition for the operation what exact mode should be adopted? I am

satisfied that no law can be laid down, for whilst text-books and treatises on this subject attempt to draw fixed lines for beginners and inexperienced operators, a surgeon's experience soon leads him to do his work in the way that seems best for his patient, and this may carry him away from the apparently beaten road. What seems best to one operator may not seem so to another; and hence the difference of opinion about many operations.

Moreover, each case is a law unto itself, and an observant and experienced surgeon will find indications in individual cases that would have a bearing on the method of operating. Therefore, the best operation is the one that gives the most chances of restoring sight to the case immediately under observation.

Even *during* the operation, unforeseen and unavoidable accidents happen that may alter the preconceived plan of doing it. I doubt if an operator ever makes the section exactly alike in any two successive cases, even in the most tractable cases. Many articles are written on cataract, with minute directions as to the mode of incision, but apart from general directions in this regard any attempts at exactly localizing the line of incision, a millimeter or half a millimeter higher or lower, is all nonsense. The size of the nucleus, the sharpness of the knife, the condition of the cornea, the depth of the anterior chamber, the set of the eyeball in the orbit, the movements of the eye and the patient, all combine to make the incision in each case somewhat different from the preceding or the next one, and in my experience this makes very little difference in the result.

Any beginner can split a cornea to extract a lens; and with a tractable patient, who has perfect control of his eye, with no accidents and complications, he can complete the operation seemingly as well as the accomplished surgeon. But with a nervous patient who can't keep the eye still, and who by unlooked for movements causes the iris to entangle in the knife or the lens to dislocate, or the vitrious to prolapse, it requires the skill that comes only from experience to meet the requirements of the case. Such accidents as these and others happen to all. In my experience, I have had all the accidents and complications that ever occur in connection with the operation and treatment of cataract.

Dexterity in operating doubtless increase the patient's chances of a good result, but it is a curious fact that the perfectly performed operation, without halt, hitch or hindrance, is sometimes followed by such after-complications as to destroy the eye, or lower the expected acuteness of vision. On the other han,d a lobored operation, attended by most unfortunate accidents, frequently results brilliantly.

Since I have lived in Richmond, I have done something over four hundred operations. I do not know exactly how many. In 1886 I reported to the Medical Society of Virginia 102 operations for cataracts at the Richmond Eye, Ear, Throat and Nose Infirmary, and 25 on the outside. In 1892 I reported another series of 100 operations done between 1886 and 1892. Since then I have made no special report, but I am sat-

isfied I have done considerably over 200. Altogether, I have done upwards of 500 extractions, including my experience before I came to Richmond. Now, of course, many operators have done more than this, but this experience is a large one and may prove valuable to others who have not done as much work in this line.

In my earlier operations I had an occasional infection of the wound, but only in cases operated on outside the Eye Infirmary. In over 400 operations performed in the infirmary I have never had but one case of infection, and that was limited to the margin of the wound, and the case made a good recovery. Ninety-eight per cent. of the whole number recovered vision ranging between 20-20 and 20-100. The *ages* ranged from 35 to 88 years of age—one case was 98, and made a good recovery.

I prepare all the cases alike for operation. Twenty-four hours in advance, the eyelids, and the skin of the forehead, cheeks, etc., are thoroughly cleansed and sterilized. The conjunctival sac is irrigated with a very weak solution of bichloride, 1 to 6 to 10,000, or with normal salt solution, and filled with what we call sterilized vaseline, 1 to 3,000 of bichloride, and the eye is sealed with a sterile pad and cotton. This dressing is removed on the operating table. I have cultures taken before this process is gone through with, and afterwards. Before, we find bacteria. Twenty-four hours later, when the eye is opened the conjunctiva is sterile in most cases.

All my earlier operations were done with an iridectomy. In the last ten or twelve years iridectomy is the exception. It is performed whenever the iris is rigid or does not respond readily to a mydriatic, or if there is any difficulty in delivering the lens through the pupil.

It is easier and safer to do the operation with an iridectomy, although the simple extraction is the ideal operation and gives the best looking eye, with a round pupil. One of the after-risks of this method is the possibility of a prolapse of the iris which occurs usually in the first twenty-four hours, but may occur later. I have seen it brought about several days after extraction by a cough or a tendency to vomit. When it happens, the iris should be drawn out and cut off, although I have seen cases of slight prolapse recover without this, by keeping the anterior chamber empty by tapping it daily. Formerly I made a peripheral incision into the capsule, and I think it is the best method when an iridectomy is done, but in simple extraction I prefer removing the anterior capsule with the forceps, or make a crucial incision in the centre. If the corneal incision is sufficiently large, and it is better to make it too large than too small, the lens is delivered without difficulty by slight pressure either on the eyeball, below the cornea, or through the lower lid. Should the lens have been dislocated it is removed with a hook.

The most difficult part of the operation is what is known as the toilet —the delivery of all the corcical remnants which must be thoroughly evacuated to get a clear pupil and to prevent after-reaction. Should the hyaloid be ruptured before the toilet is completed the eye should be let

alone, as manipulation may empty the eyeball.

Troubles of the capsule and iris are often due to an incomplete toilet. Even with the greatest care, especially in simple extractions where remnants of the cortex can linger behind the upper part of the iris, we sometimes fail to get all of it away, and in consequence, have subsequent trouble either from iritis or clouding of the capsule.

When the toilet is completed we fill the eye with sterilized vaseline, apply a thin, wet pad of bichloride cotton, fill both orbits with sterile cotton, held in place by adhesive strips, and put on a mask to prevent any damage from outside accident.

Some operators handcuff the patients, but I fail to see the necessity for this. The patient it put to bed and kept quiet for forty-eight hours, during which time the eye is let alone, unless some complaint of a foreign body, or other discomfort is made, when it is examined at the end of twenty-four hours to see if the iris is prolapsed, in which event it is drawn out and cut off. This, however, rarely happens. At the end of forty-eight hours I make a careful examination of the eye. If it is doing well I simply put in a drop of antiseptic solution, 1 to 5,000 bichloride, filling the eye with sterile vaseline and closing it again as before. During the fourth day I allow the sound eye to be uncovered if the case is doing well, and a mydriatic is instilled into the operated eye, which is rebandaged. On the seventh or eighth day the operated eye is freed from the bandage in the day time, and covered at night as a precaution. In ten days or two weeks they leave the hospital. These are the good cases. All, however, do not do so well. Hemorrhage into the anterior chamber during or after the operation, or remnants of cortex may give us a clouded pupil which requires time for its clearing up. The cornea may also be streaked from the trituration during the toilet. In some casese we have *slow healing of the wound* due to defective nutrition, or to a piece of capsule in the wound, or to a partial prolapse of the iris, the inner edge of the wound being plugged by iris without protruding through it.

An iritis, mild in some cases, severe in others, is the most frequent complication, especially in cases of a rheumatic diathesis It usually begins on the fourth day after the operation, and it often delays the result. The inflammation of the iris may not only cause adhesions to the capsule, but may involve the capsule itself, causing a capsulitis that will cloud or wrinkle the capsule. All these complications may result in so-called secondary cataract, which may disappear under hot formentations and mydriatics, or may require a needle operation to complete the work and give clear cut vision. In fact, a majority of cataract operations require a secondary needling to get the best results. They should be done as soon as possible after the wound has healed and the eye cleared up. Whilst comparatively free from the risk, we must not forget that the operation may rarely be followed by a glaucomatous attack, which would necessitate an immediate iridectomy, and that any lack of care in sterilizing the instruments used might result in infecting the eye. Very little reaction follows the operation, as a rule,

and in forty-eight hours the patient is ready to have glasses adjusted (of course, you understand that after the removal of the lens, neither distant nor near vision can be had without substituting artificial lenses for the natural lens that has been removed). Glasses can generally be given in six or eight weeks after the primary extraction. The high degree of astigmatism following the change in the curvature of the cornea from the incision, has by that time become reduced to a low degree of from 1 to 2 D., and may disappear entirely, although it does not always do so. We usually find the glasses given first have to be changed later on. We also find many cases that declare at first that they can't see with any glasses, but by exercising a little patience the ability to see will come gradually to them as if they were learning their letters for the second time. They had lost the power of fixation during their period of blindness, and they require practice to acquire it again.

Cataract lenses should be of large size so as to give a good field, and if the patient can get accustomed to bi-focal lenses it is far preferable to two pairs which have to be swapped several times daily.

We sometimes meet with a case that gets both near and distant vision with the same lens—the so-called accommodation in a lensless eye. Some years ago I reported a case of this kind, since which time I have met two other cases in the same family. This is explained by a peculiar ability to interpret the diffusion circles on the retina, but such cases generally have a small opening in the capsule, which reduces the size of the circles just as a stenopaic slit or a small perforation in a disc, will improve vision in irregular astigmatism by reducing the size of the dispersion circles.

Appendicitis and When to Operate.

By H. S. Lott, M. D., Winston-Salem, N. C.

The time to operate for appendicitis is when the patient has it.

Now, with this as a premises, the want is, for greater skill in early diagnosis, and more earnest conviction as to the best mode of treatment.

That the subject of treatment is one for discussion and wavering, is most unfortunate—for the victim of the disease; the reason being, that cases of appendicitis left alone, or treated with medicines only, either die, or become permanent cripples and chronic sufferers. Whereas, cases of appendicitis in which the organ is removed, and the adjacent viscera treated in a prompt and cleanly manner, not only get well, in a very large majority, but the patient is left in a more healthful condition.

Picture a perforation of the appendix. And this perforation is sure to occur, sooner or later, which is due to one of two mechanical causes —either an occlusion of its lumen, with an accumulation of explosive material beyond the point of stricture or gangrenous ulceration of its wall, at a given point; and in a large majority of cases the two causes combine to bring about the disaster.

Now, a gun has exploded within the abdomen, and not only is the discharge of filthy ammunition distributed throughout the peritoneal cavity, but the weapon is there, as well.

The signs of this accident are so marked that they should not be mistaken. Pain—sudden, intense and progressive; at first reflected somewhat throughout the abdomen, but soon most marked in the right side, at a point about midway between the crest of the ilium and the umbilicus; this point being well guarded by a rigid right rectus muscle—and marked shock—with a pulse either normal, or only slightly accelerated, and most likely a subnormal temperature.

The leading symptoms are few, but are classical and convincing, from the fact that no other condition produces identical ones. Variations in the point of most exquisite tenderness will occur; and are due to the different directions in which the appendix lies. For instance, I have seen a diseased appendix so much elongated that it crossed the pelvis and was firmly adherent to the left tube and ovary. Thus it may dip well down in the pelvis, its adherent tip causing vesical irritability, or, pointing up, it may be come adherent, and the perforation occur in such close proximity to the liver and gall bladder as to closely simulate impacted gall stone. But in this condition the pain, and point of greatest tenderness, are in the upper third of the right rectus; and also in most cases, the enlarged gall bladder may be felt projecting just below the border of the rib.

Between appendicited and renal colic, the difference is marked. The pain, in the former, being at first, maybe, distributed throughout the abdomen, but locating finally, and exquisitely, in the right side. In the latter, the patient tosses with the pain, which begins in the back, where the kidney is, and follows the course of the ureter to the bladder; as the patient will often mark out with the hand.

The cases in which it is most difficult to make clear the diagnosis, are those of blended pelvic and abdominal pain—in women.

An inflamed tube and ovary, with suppuration pending, or in process, and especially if it be on the right side, give many symptoms which may mislead, but should not. In appendicitis, the pain—at first diffuse—will finally locate, with most exquisiteness, about the middle third of the right rectus; and the tenderness elsewhere, in abdomen and pelvis, will disappear or materially lessen in severity. An examination through the vagina, (and in case of doubt, this should always be made), will reveal a uterus, free, and appendages normal, with little or no tenderness on the left side. Whereas, with an inflamed or suppurating tube or ovary, the examining finger will find the uterus, most likely, fixed, with an enlarged and tender mass on one side or the other, or both, which may in many cases be taken between the two hands, from above and below. Or, if the case has made much progress, the entire pelvis may be found blocked with exudate, the feel to the examining finger being that of a solid wall, above, below, and to each side; (and in case you find this, don't tell them it's the "cellulitis," although it be a rather mannerly way of saying that you don't know). Furthermore, the pain in appendicitis is exquisite and persistent, whereas, in inflamed, and most especially in sup-

purating appendages, it will be intense, but paroxysmal and of an expulsive character; it being the natural function of the female pelvic organs to throw off an additional burden.

Don't wait for a "lump" in appendicitis, which means that the peritoneum is trying to protect itself from the filth with which it has been flooded.

If the lump is inevitable, and must come, a vent in the abdominal wall will favor the cure of the patient. Even a protracted convalescense, with many dressings, is better than a funeral. And, by prompt, cleanly and thorough surgical intervention, both may be avoided.

Recurrent attacks of abdominal pain, locating, chiefly, in the right side, are most apt to be cases of appendicitis. Typhlitis and para-typhlitis, we know to-day to be only symptoms, secondary to the prime cause, which lies in the appendix, and is the one to be removed. Likewise, we know that an inflammatory exudate blocking the pelvis, and resulting in abcess, has its start from an infected focus within tube or ovary, and that early recognition and early removal of this focus of infection, will prevent the catastrophe. Furthermore, we know that many cases of tubercular appendicitis, and of tubercular ovaritis, with recurrent attacks of slight pain, and slight elevation of temperature, are treated throughout weary weeks as cases of "fever," the ominous title, which, like charity, covers a multitude of—ignorance, and furnishes a topic for long-winded papers, which addle our brains, and teach us nothing.

Appendicitis is a surgical disease —which means that it is a specific condition, with a known focus of infection. So long as this focus remains, attacks will recur; and the life and health of the patient are imperiled. Whereas, a vent in the abdominal wall, with clean removal of the focus of infection, and the mechanical irritant, promises best for immediate reaction, and remote immunity.

Early Diagnosis of Tuberculosis the Most Valuable Factor in the Treatment.*

By C. V. Reynolds, M. D., Asheville, N. C.

In 1882 Koch was awarded for his untiring efforts the discovery of the bacillus of tuberculosis, thereby rekindling a latent spark in the medical world, until now we, as medical men, are ablaze with the hope of adding something to illuminate a hidden mystery to the worst enemy mankind is heir to.

Koch did make a wonderful discovery, and great honor is due him, but we err too often in awaiting the diagnosis for the detection of the bacillus.

We are willing to admit that it is the rare exception that the offspring inherits directly tuberculosis, but are afraid that we are a little too scientific for our patients' good and will not allow heredity to occupy its important place. The cellular structure furnished by the male pronucleus, and likewise that of the female, pro vides the material from which the new life builds its fort to stand the

*Read before the Tri-State Medical Association of the Carolinas and Virginia, February 27th, 1902, at their annual meeting held in Asheville, N. C.

storm of its enemy, the infinitely small, yet overpowering bacteria.

If the cells are of pure structure and not weakened by previous invasions of nature's enemy in the mechanism of the maternal or paternal side, then can we say that heredity plays no important part, but until then, remembering the cellular contents are our protectors, we will be compelled to admit our forces will easily be overpowered and the enemy gain possession, and in this instance tuberculosis will be the result.

Assuming then, that heredity does play an important factor in the development of phthisis, we have reached one essential step in battling with this disease.

How to combat this disease is one of the greatest medical questions of the day. First then, we know the history of our subject, and when we come to seek deeper into the hidden mystery of the case, it is all important that we realize what constitutes the normal conditions of affairs, so that we may be able at a glance to recognize abnormalities as they arise.

I believe that it is a substantiated fact that those who fall heir to this disease by heredity are pale, aenemic and of a light physical stature; then when the chest is laid bare, we should at once recognize the diminished antero-posterior diameter with depressions in the supra. and infra. clavicular spaces, the rapid respiratory movements and posterially the "alar chest" with the scapula standing out like sentinels pointing to danger within.

Along with this we find upon investigation, a loss of appetite, strength, night sweats, evening temperature, and probably a history of cough or colds very difficult to relieve.

But there is another class of patients who do not give us such a definite picture. Those are the accidental cases of infection, with their robust physique, no loss of appetite nor night sweats, but come to us with a cough and a feeling of general malaise—we now resort to the microscope to find the blood below par and no tubercle bacilli in the sputa, but instead, the field is filled with streptococci, staphylacocci and diplococci—everything save the tubercule bacillus itself. What shall we do, resort to the tuberculine test? In answer to this question, I would say that the tuberculine, theoretically, should give no ill effect, but it has a selective action producing hyperemic congestion which may cause resolution, or agitate and stimulate an area, death being the result, which otherwise would have remained in its latent state.

One of the most important indications in insipient tuberculosis is the changes in the blood, where we find the hemoglobin diminished, diminished leucocytosis—"those predominant being the uninuclear lymphocites, and now and then a myelocyte" —J. H. Burke.—This being the case even before it is possible to detect the tubercle bacilli in the sputa.

This early diagnosis should be the zenith of our ambition, but as this is not in every case attained, we, with our ever watchful eye, will, at the earliest possible moment, detect these cases in the early stages, where we can at least arrest the trouble.

This brings us to the question, "What shall we do with them?" Recognizing that preceding the de-

velopment of the tubercle bacillus we have the important factor, heredity; second, the changes in the blood; and last, that we often find a forerunner in the sputa, the streptococci, and staphylocci, whose duty it seems to be, to soften, break down and emulsify the soil in the lung tissue, so that the tubercle bacilli enter in to do their destructive work.

It is a recognized fact that prophylaxis is the keynote to success in eliminating this, the most destructive malady we have, but the author of this article will consider this as a decided fact and will deal with those affected. Then the medical profession stands as a unit as to prophylaxis hygiene and constitutional medication, leaving only the adjuvents for us to wrangle and quarrel over.

The first and early diagnosis is the most essential point, and having made our diagnosis, the next thing is to better their hygienic surroundings, and if financially able, change their climates, endeavoring to give them a high, moderately dry atmosphere ladened with ozone and of an even temperature, not forgetting to instruct your patient to place himself with some one of medical skill and ability, whom you may direct, and allow your co-worker to select his idea of a hygienic home.

No physician in a distant land, I care not how trained he may be, is capable of selecting a residence for his patient in a place he is not entirely familiar with—entrust that to your brother co-worker.

You may be of the opinion they need not the care of another physician than yourself. Do not compliment yourself so as to make this gross error—anyone with tuberculosis and its complications needs an ever watchful eye, and woe to the physician who fails to recognize that it is the united efforts of all, we need, in arresting these cases. Many cases have we seen here in this city fast succumbing to the disease, and being wafted to an untimely grave, that if proper care and attention had been given them, would have had their trouble at least arrested. Climatic influence is a great source of benefit—all of us recognize this fact. But this alone is not sufficient. One-third of the tubercular patients sent from their homes are climatic seekers, not health seekers, and who is at fault? The physician who is supposed to be the custodian of health and prescribes at long range, and I may add, misses wide his mark and leaves his patient to roam the world over to scatter the disease to others and to return home unimproved and to die. I say, gentlemen, this class of medical men are a menace to the profession and dangerous to the public welfare. Doctors, "United we stand, divided we fall."

There has been quite a little written lately upholding the home cure of tuberculosis, ignoring climatic influence, which is in my opinion an erroneous idea, and calculated to do great harm at this time when we are making such rapid progress in the prevention and cure of insipient cases, and I further contend that statistics will not bear these gentlemen out in their assertions, and trust that those of us who have read these articles will quickly forget and relegate them to ideas of the past.

Make arrangements to have your patients change their climate at once,

do not attempt to cure them in the same surroundings in which the disease was contracted. The soil is too prolific, and nothing awaits you but to see your patient grow worse, and at last you are compelled to send them away when it is too late, result of which you are sentenced, and your patient dies. Do not attempt to experiment with those entrusted to your care in an effort to allow them to remain at home with loved ones, for experimental medicine is most uncertain. Speak plainly, emphatically, emphasizing the gravity of the situation, and no harm will be done, for truth must survive and it remains for us to decide wherein is truth.

For the second class of patients who are less fortunate, it is our duty to do the best we can, and to work as a united body to get the government to lend us a helping hand, and establish hospitals in selected climates to assist those not able to provide for themselves and thereby aid in restoring these early cases to useful citizenship.

Cures, or arrested cases, are reported from all forms of treatment, and I believe the medical profession stands as a unit in that there is no specific, and that climate, hygiene, nutrition, rest, judicious pulmonary exercise, is the secret of success, but tuberculosis is a complex disease, and by the aid of adjuvants, life is made more vigorous, decay less rapid, and death more remote.

In looking over the field of adjuvants which is the most useful?

First, the great avenue of infection is through the respiratory tract.

Second, the area of disease is located somewhere in the respiratory tract.

Third, allwise nature in endeavoring to throw off this disease is through a respiratory tract.

Fourth, the enemy—the tubercle—is lodged in the respiratory tract.

Then why not by inter-pulmonary medication lend a helping hand in eradicating this disease? Can we reach the air cells by this method of treatment? It has been proven by Homer M. Thomas by microscopical proofs of the penetrability of vaporized medication into the pulmonary alveoli in a paper read before the Missippi Valley Medical Association at Louisville, in 1897.

When reached, does this method of antisepsis prove beneficial? If by no other reasoning than by clinical experience, I would answer this question in the affirmative, and further add that it is of paramount importance. But I can imagine I hear you say as you follow me in my discourse, there is no known antiseptic that can be stood by the lung tissue that will destroy the tubercle bacillus—this may be true, but there are those that will arrest their development, then too, the tubercule bacilli in themselves do not cause the most harm, and would remain relatively inert were it not for their dangerous alliance with the accompanying bacteria—streptococci, staphylocci and diplococci—that break down, destroy and so intoxicate the general system that makes this malady so terrible, and these the antiseptics will destroy, thereby aiding nature's forces (the leucocytes) to attack and destroy the tubercle bacillus.

In the giant cell formation, or the

encapsulated areas where there is no blood supply and no other mode of entrance—I hear you ask, what good can the inter-pulmonary medication do? In answering this, I will ask you, what can any known method do? In these instances we can stimulate cellular activity and render the surrounding neighborhood more sterile, thereby fortifying against our enemy in a more secure manner and aid materially against further extension of the trouble. Barring above claims of inter-pulmonary medication, it is of great value, if for no other reason that it liquifies, or softens the sputa, aiding to arrest the trouble by throwing off, by the mouthful the antagonizing germs.

SUMMARY.

1. We err too often in waiting our diagnosis for the detection of bacillus.

2. Heredity does play an important factor in the development of tuberculosis.

3. Recognize normal conditions in order to be able to recognize abnormalities as they arise.

4. Careful examination of sputum and blood are great aids in the early diagnosis of phthisis.

5. Home treatment should be discouraged—change of climate essential.

6. Very important to have tubercular patient always directly under a physician's care.

7. Climatic influences are of great benefit, but adjuvents are essential in arresting the trouble.

8. Inter-pulmonary medication the most important adjuvent.

A New Method of Treating the Persistent Vomiting in Pregnancy.

Condamin (*Medical Press,* March 26, 1902,) gives a new method of treatment of persistent vomiting of pregnancy. The writer says that although it cannot be said that the principle is altogether new, it is still so excellent that it should be more widely known than it is. The author sees in such vomiting a sign of intoxication and an indication for removal of the toxic substance, whatever it may be. It is his constant endeavor to provide a substitute for the induction of the abortion that such cases generally end in. For some time past he has invariably been able to dispose with this by adopting the following line of treatment:

Absolute abstinence from food for from eight to ten days; daily injections into the rectum of three to four liters of artificial serum in quantities of 300 grammes, with or without the addition of opium; in case of absolute intolerance on the part of the rectum, hypodermic infusion; after ten or twelve days' abstinence from food, gradual return to feeding by the mouth.—*Medical Age.*

The true democratic idea is, not that every man shall be on a level with every other man, but that every man shall be what God made him without let or hidrance.—*Henry Ward Beecher.*

The wealth of a nation then, first, and its peace and well-being besides, depend on the number of persons it can employ making good and useful things.—*John Ruskin.*

AMONG OUR EXCHANGES.

The Origin and Prevention of Oxalate Renal Calculi.

At a recent meeting of the Berlin Medical Society, G. Klemper (*Medical Press,* December 25, 1901,) gave an address on this subject. It is a custom, he said, when an idividual voids a stone with acid urine to order something suitable for the treatment of uric acid calculi. If the stone in question be an oxalate, such treatment would be injurious and would certainly lead to recurrence. If the stone be a real oxalate the situation would be difficult, as up to the present no means has been determined by which a return of the symptoms can be prevented. The speaker, in association with Tripstein, has carried out a series of investigations in the Institute for Medical Diagnosis, and has ascertained that oxalates are not so infrequent as has been supposed. In sixteen cases oxalates were met with five times. In Israel's practice fifty-four per cent. of the calculi were formed principally or in part of oxalates.

The question of prevention is covered by that of the source of oxalate of lime. According to general opinion this is of alimentary origin, spinach especially contains a large quantity of it, about 110 milligrammes in 100 grammes. The gastric juice dissolves the greater part, and 25 to 35 milligrammes passes into the urine. As to what becomes of the remaining 75 milligrammes, the author is of the opinion that it is not destroyed in the tissues. The greater part of the oxalate of lime is destroyed in the intestines, and traces only are found in the stools. He has injected minute doses of oxalate of lime into mice and dogs, and found that all passed off smoothly in both animals. It is not, therefore, destroyed in the tissue changes, but what appears in the urine is absorbed from the stomach. Although oxalates appearing in urine are of an elementary nature, the avoidance of vegetables and fruits in the diet cannot insure urine free from oxalates. The reason for this was not understood until Sommel, of Munich, showed that when gelatin was given 4 to 15 milligrammes of oxalates were found. This discovery drew the speaker's attention to glycocol, which is known to be a solvent for oxalates. Now creatin is a glycocol derivative that plays an important part in the system. It forms both urea and oxalic acid. The glycolic acid present with bile is also important, as when this is absorbed glycocol becomes free, and the formation of oxalates is possible. In the icterus of resorption also oxalic acid becomes free.

These facts tend to an explanation of the origin of oxalates. The aim now should be not to avoid substances containing oxalates, but to facilitate its solution in the urine. The double phosphate of soda, the author thinks, is not sufficient for the purpose, but there is another material that acts in the right direction—magnesia. It has been shown that oxalate of lime is soluble in salts of mag-

nesia when heated. A milk diet is unsuitable, as it is poor in magnesia and rich in lime. If food is divided according to its richness or poverty in lime into two groups, vegetables would belong to the first, and to the latter, fish and the different kinds of meat. Milk and eggs are to be carefully avoided when there is a tendency to oxalates. In cases with such tendency he recommends the avoidance of milk, eggs and vegetables, and in their place recommends flesh, vegetables and farinaceous foods, and in the way of medicine two grains of bitter salts daily.—*Medical Age.*

"Christian Science."

Absolutely correct is the *Philadelphia Medical Journal* when it observes that "Christian Science needs the attention of the legal rather than of the medical profession. It has assumed the proportions of a colossal financial fraud, and we doubt whether the fulminations of the whole medical press will prevail against it. The hand of the law alone can deal with it. If any one doubts this fact, let him read the expose of Eddyism recently published by Frederick W. Peabody, Esq., of the Boston bar. The lawyer reveals with a bold and merciless pen, the transactions by which Mrs. Eddy has amassed a fortune."

Doctors know full well that devotion to the delusions of the modern fad skirts the borderland of insanity and while professional dignity would almost preclude medical men from noticing the fad and fraud, yet duty to its innocent victims demands unceasing efforts towards showing up the unsavory crew.

In his masterly address Mr. Peabody says: "The influence of Mrs. Eddy is infinitely harmful. It is literally demoralizing thousands of people. It is remorselessly separating husband and wife, parent and child. It is turning from the pursuit of knowledge and steeping in the superstition of the Middle Ages, untold thousands. It is the mother of a new-old witchcraft, which has so taken possession of the minds and lives of many people that they live in constant terror of its believed baneful work. Unless you know it to be a fact, as I do, that right here in the city of Boston there are hundreds and hundreds of people living in the confident belief that the malicious minds of others have the power to cause, and are causing disease and death and all forms of domestic, social and business disaster, it will be difficult for you to believe it. This belief among Christian Scientists has reached the proportions almost of panic."—*Medical Mirror.*

Cauterizing the Eyeball.

Vallin (*Medical Press,* Jan. 8, 1902) contributes a paper on the substitution of cauterizing the eyeball for enucleation in children. He says enucleation of the ocular globe in children is a deplorable operation on account of the deformity which results, and which becomes more exaggerated as years advance. Except in the case of malignant tumors, recourse should be had to the method recommended by Dianoux, and which consists in practicing on the cornea, without however opening the anterior chamber, a cauterization in the form of a star with the point of a thermocautery maintained at a low

red heat. That done, a circle is traced around the center of the cornea, and the disk thus circumscribed is pierced quickly in the center with the point of the thermocautery brought to a white heat so as to allow the aqueous humor to escape.

The wound is then powdered with bismuth, and a compressive bandage applied for three days. At the end of that time the bandage is removed and the parts washed with boiled water, and solution of cocaine and eserine instilled between the lids each day until the wound has cicatrized. After all irritation has disappeared massage is practiced for a few days, and finally the cornea is tattoed.

In all the cases treated by this method the results were very satisfactory.—*Med. Age.*

Therapeutic Hints.

Dr. S. Baruch is of the opinion that the principal reason for disappointing results with the salicylates in acute articular rheumatism is to be found in the use of inadequate doses. For the last six or eight years he has made use of the pure salicylic acid made from the oil of wintergreen in combination with bicarbonate of soda, thus making the salicylate of soda extemporaneously. He generally gave it in doses of 20 grains of pure salicylic acid combined with ten grains of sodium bicarbonate. If possible, he avoided giving it until 4 o'clock in the afternoon, and repeated it at intervals of two hours until eighty grains had been taken. There is no use in giving the salicylates unless tinnitus aurium was produced, but most of this would pass off during the night. The treatment of the disease was assisted by the application of a cold wet compress to the affected joint. The compress should be made of three or four thicknesses of linen wrung out of water at 60 degrees F. and covered with a layer of flannel. The compress should be renewed at intervals of two or three hours. If the fever were quite high the compress should be applied very wet. As a rule, he did not employ these compresses unless the body temperature was over 100 degrees F. As a rule, an ice bag should not be applied continuously for more than half an hour, for, it produces a localized cyanosis by a paralysis of the cutaneous circulation. The ice bag should be applied in this intermittent manner over the precordium.

Cuspidors for Railway Cars.

The board of health of the State of Pennsylvania has adopted resolutions requiring cuspidores in the trains of the Pennsylvania Railroad and Philadelphia & Reading Railway, and is attempting to secure legislation inflicting a penalty for infringement of the rule. The tentative provisions of the resolutions require a cuspidor for each seat in the smokers' car and one at either end of the day coaches. In addition, rigid sanitary precautions will be required in the thorough cleansing and disinfection of the receptacles at the end of each run. In the communication to the railroad companies the board cites the fact that the latest statistics of the Unied States government shows that three fourths of all the men use tobacco, 80 per cent. expectorate, and 12,000,000 smoke. The railroad authorities

look upon the requirements outlined as entailing a hardship upon the roads and propose that the Pennsylvania Legislature, instead of requiring the installation of cuspidores, should follow the example set by the State of New York and make expectoration in cars or on stations a misdemeanor, punishable with fine or imprisonment.—*N. Y. Med. Journal.*

"Osteopathy" in Illinois.

We congratulate the Illinois State board of health on its final success in the prosecution of one Joseph P. Gordon for illegal practice. The Illinois law authorizes the board to classify applicants for its license into those who wish to practice medicine in all its branches and those who intend to carry on the practice of some real or pretended system of healing, but they must all acquire a license. Gordon had not applied for a license, and in his testimony he said: "I understand nothing about medicine." He professed to make diagnoses, however, and he alleged his immunity under the law, grounding his allegation on the pretense that his system of treatment was "magnetic" or of the nature of suggestion, although his own testimony showed plainly that manipulation was his one therapeutical resource. The circuit court, apparently accepting this quack's sophistry, instructed the jury to find for the defendant, and the appellate court affirmed that judgment, but it has been reversed by Chief Justice Wilkin, of the supreme court, whose opinion is an admirable example of common sense reasoning. —*N. Y. Med. Journal.*

Newspapers and Narcotics.

The newspapers of the city recently and very properly have been agitating against the general sale of cocain, which is reported to be going on. Cocain wholesales at $6 an ounce, and one druggist here is reputed to buy the drug in 100-pound lots. But the newspapers miss the real source of danger, which lies in the multitude of patent medicines bought freely by the public and containing as their only active agents morphine, cocaine and other narcotic drugs. It is these which give to many unfortunates their first taste for "nerve-tickling" and soul-destroying drugs. If the newspapers are sincere in their desire to protect the community from degrading drug habits, they can do two things which will be of the greatest benefit to the community; first, agitate for a law compelling the makers of patent medicines to publish the true formula of their compounds on every bottle; and second, refuse to advertise those patent medicines which are well known to contain no active ingredient except one or more of the narcotic drugs. Will the newspapers do the community this real service?—*Cleveland Med. Journal.*

Dermatitis Herpetiformis in Childhood.

Dermatitis Herpetiformis, first described by Professor Duhring, of Philadelphia, is probably of commoner occurrence than is generally supposed, more especially in children; two cases are described by William S. Gottheil, of New York, in the June number of the Ar-

chives of Pediatrics. The resemblance at first sight to ordinary eczema, dermatitis or impetigo is marked and doubtless cases of the disease are not infrequently so classified. The points which distinguish the less common affection are:

1. The extreme obstinacy and chronicity of the malady; it being prolonged almost indefinitely by successive exacerbations or relapses.

2. Its original herpatic character and subsequent multiformity of lesion.

3. The intense pruritus.

4. Its recalcitrancy to treatment.

Any apparent eczema, dermatitis or impetigo in children presenting these features should be carefully observed; a certain number of them will undoubtedly be found to be cases of Duhring's disease.

Mosquitos and Malaria.

Press dispatches from Japan state that remarkable results have been have been obtained relative to the mode of infection in malarial disease by experiments conducted by the Japanese military authorities in Formosa. A battalion of soldiers, completely protected from mosquitoes for 161 days during the malarial season, escaped the disease entirely, whereas there were 259 cases of malaria in an unprotected batallion in the same place and during the same length of time. These results, if correctly quoted, confirm in a most conclusive way the fact that malaria can be transmitted only by means of the mosquito, and call for the establishment of organized effort for the extermination of organized effort for the extermination of these annoying and pestiferous insects in malarial localities. That such a comprehensive test, so valuable is its results, should be carried out by the Japanese is evidence of acquaintance with and interest in the latest advances of medical science.—*Medical Record.*

The Best Method for Administering Quinine as a Preventive of Malarial Fever.

E. H. Read (*Journal of Tropical Medicine,* January 15, 1902,) concludes from his experience that the best way of giving quinine as a prophylactic is the following: 1. For male adults in good health, tablets in 15-grain doses every fifth day; for those in poor health, the solution used in the same way, or 15-grain powder in a tablespoonful of porridge or milk. 2. For female adults, 8 grains should be given instead of 15; pregnant women may take 2½ grains daily, in either of the above ways, from the beginning of pregnancy. 3. Children of either sex under one year, ½ grain of the powder every third day in a spoonful of milk, followed by a spoonful of jam or honey; those from one to five years, 1 grain every third day; from five to ten years, 2 grains every third day; from ten to fifteen years, 3 grains; above 15 years, the ordinary adult dose, taken in the same way—*Medical Age.*

Routine Medical Practice.

We all have our therapeutic ruts, and we all know consultants from whom patients find it very difficult to escape without their favorite prescription, no matter what the malady may be. Men of this stamp gain

a certain measure of experience, and if not of a practical turn, may become experts in mechanical procedures, but to experience in the true sense of the word they never attain. In reality they suffer with the all-prevailing vice of intellectual idleness. It is so much easier to do a penny-in-the-slot sort of practice, in which each symptom is at once met by its appropriate drug, than to make a careful examination and really to study the case systematically.—William Osler in *Merk's Archives.*

The Doctor's Conscience.

The following tale, which if not true is "ben trovatore," is told of a deceased well known London physician whose pride it was to declare that he could feel a patient's pulse, auscultate him, write a prescription and pocket a fee in a space of time varying from three to five minutes.

One day a man was shown into the consulting room and was rapidly examined. At he conclusion he shook hands with the doctor and said:

"I am especially glad to meet you, as I have often heard my father, Colonel ——, speak of his old friend, Dr. ——."

"What," cried the doctor, "Are you Dick ——'s son? My dear fellow, fling that prescription into the fire, and sit down and tell me what is the matter with you."

Sprinkling to Reduce Temperature.

Dr. S. Solis Cohen has for some time used sprinking of fever patients for the reduction of temperature. The water ranges from 60 to 70 degrees F., and is poured from an ordinary sprinkling pot. A rubber sheet is placed under the patient, with the head of the bed raised, and so arranged by folding that the water runs off from the foot of the bed into a receptacle. To this may be added rubbing with ice if the temperature is very high.—*Medical Council.*

A Wise and Humane Law.

A statute of the State of Connecticut authorizes the voluntary self-commitment of alcoholic and narcotic sufferers to any inebriate sanitarium, established by the laws of the State, for a period not exceeding one year, during which time they shall continue subject to restraint and treatment the same as if committed by the Probate Court. Hence, for these purposes the sanitariums of Connecticut have become famous throughout the United States.

The War Department has recently directed that one of the seacoast defences near Baltimore, Md., shall hereafter be known as Battery Lazear. According to the order this action was taken in honor of Dr. Jesse W. Lazear, late an acting assistant surgeon, United States Army, who, while on a visit to Las Animas Hospital, Havana, Cuba, September 13, 1900, and while collecting blood from yellow fever patients for scientific study, was bitten by a Culex mosquito and deliberately allowed it to satisfy its hunger, and as a result contracted yellow fever, of which he died September 25th, 1900, thus by his self-sacrifice positively determining that the mosquito carries yellow fever infection.

NATURE AND SCIENCE.

(Youth's Companion.)

The Origin of Precious Ores.

Men sometimes dream of enormous wealth stored deep in the earth, below the reach of miners, but according to the statement of Prof. C. R. Van Hise, at the Denver meeting of the American Association for the Advancement of Science, there is little or no ground to believe that valuable metallic deposits lie very deep in the earth's crust. Such deposits, he said, are made by underground waters, and owing to the pressure on the rocks at great depths, the waters are confined to a shell near the surface. With few exceptions ore deposits become too lean to repay working below 3,000 feet. Nine mines in ten, taking the world as a whole, are poorer in the second thousand feet than in the first thousand, and poorer yet in the third than in the second.

Hibernation of Mosquitoes.

If the mosquito has any friends among mankind, they may rejoice in the assurance given by Dr. L. O. Howard, of the Department of Agriculture, that this cosmopolitan pest does not necessarily perish with the oncoming of winter. On the contrary, mosquitoes have been observed in the lattitude of Washington to hibernate, adult specimens living from November until the succeeding April or May with all their powers of torment unimpaired, although their activity is suspended in winter. The mosquito needs but little food, and it is the female that thirsts for blood, the males contenting themselves with water and vegetable fluids. Doctor Howard ascribes the fact that mosquitoes are often found upon dry praries, many miles from water, to the longevity of the adults of certain species, which enables them to survive seasons of drought. Railroads have been responsible for the transportation of mosquitoes into regions where they were previously rare. Their power of flight is not great, and it is believed that they are not distributed far through the agency of winds.

Sand-Buried Documents in Turkestan.

In his explorations of Chinese Turkestan, Dr. M. A. Stein, has found, in some of the sand-covered towns and villages, many documents written on wooden tablets and carefully sealed, which when deciphered, will probably throw much light upon the life of the people who formerly dwelt in this desert. The preservative properties of the sand have kept

the ink black and the seals and binding-strings intact. The script in which the documents are written is of a still existing form known in India. Some of the buried towns are 100 miles from the present edge of the desert, and one of them covers, with its scattered ruins of dwellings and shrines, a space of 24 square miles.

Peculiarities of the Black Sea.

Sir John Murray recently showed how remarkably the Black Sea differs from other seas and oceans. A surface current flows continuously from the Black Sea into the Mediterranean, and an undercurrent from the Mediterranean into the Black Sea. The latter current is salt, and, being heavier than the fresh water above, it remains stagnant at the bottom. Being saturated with sulphurretted hydrogen, this water will not maintain life, and so the Black Sea contains no living inhabitants below the depts of about 100 fathoms. The deeper water when brought to the surface smells exactly like rotten eggs.

The Teeming Veins of the Earth.

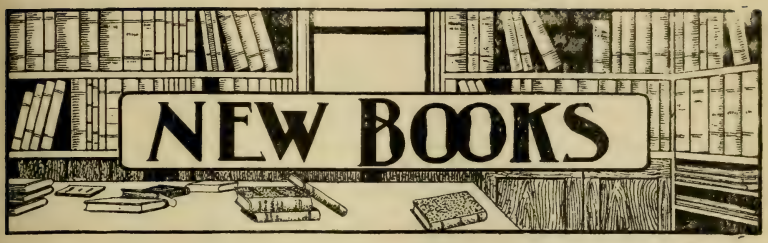
One of the most interesting results of practical geology in our time is the discovery of rich supplies of subterranean water under many of the dry and desert regions of the earth. Attention has frequently been called to the utilization of these discoveries in the western and southwestern parts of the United States, and it appears that other lands are equally favored with hidden treasures of life-giving water. The Geological Survey of Queensland, Australia, reports that south of the Gulf of Carpentaria, water-bearing strata occur at depths of 2,000 and 3,000 feet, from which artesian wells draw supplies varying from 100,000 to 1,000,000 gallons a day.

"Dust Devils" of the Desert.

Travelers in the celebrated Death Valley of California have described the wonderful contortions of the sand-pillars that small whirlwinds sometimes send spinning across the hot plain. Even more remarkable are the "dust devils" seen by Mr. H. F. Witherby, the English explorer, in the valley of the White Nile. Sometimes two of these whirling columns, gyrating in opposite directions, meet, "and if they be well matched the collision stops them, and a struggle ensues as to which way they shall twist. Gradually one gains the mastery, and the two combined begin to gyrate alike and then rush on together." Some of these whirls will strip the clothes from an Arab's back, or twist a goat round and round like a top.

Nature of the Sun's Corona.

Professor W. W. Campbell, the director of the Lick Observatory, in summing up the results of the observations and photographs made by the party sent from that conservatory to study the total eclipse of the sun in Sumatra last May, says that the general conclusion to be drawn is that coronal structure surrounding the sun is made up of matter, probably very finely divided, ejected from the surface of the sun with great velocities, just as we have matter ejected now and then from terrestrial volcanoes, with comparatively small velocities.



A Symposium on Syphilis, by seventeen different authors of reputation, by E. B. Treat & Co., New York. A well printed book of 125 pages. $1.00.

This little book contains much that should interest the practitioner. The table of contents will indicate its usefulness.

The Etiology of Syphilis; The Clinical Characteristics of Chancre; The Unrecognized Chancre; Unrecognized Syphilis in General Practice; Syphilis of the Stomach, of the Nervous System, of the Bronchix, Lungs and Pleura, of the Nose and Throat; The Curability of Syphilis; Diagnosis and Management of Syphilis; Diagnosis and Management of Syphilis; Treatment of Syphilis.

The Outlook.—There are several notable pictoral features of peculiarly timely interest and also others of an artistic flavor in the Magazine Number of The Outlook for May. In the first class may be named that describing District Attorney Jerome's official home on the East Side of New York, and that of the King of Spain, who this month becomes king in act as well as in name, by General Stewart L. Woodford, formerly United States Minister to Spain. Art and music are respectively represented by an article on the great Spanish painter, Sorolla, written by one of his pupils and illustrated by reproductions of paintings and original sketches, and by a thoughtful critical and personal article on the work of Grieg by Daniel Gregory Mason. Western interests and commercial interests are brought to the front by Mr. Ray Stannard Baker's "The Commerce of the Great Lakes," which is as well informed as it is readable, and is made picturesque by a dozen or more illustrations relating to the shipping and commerce of the lakes. Articles relating to the spring season are, Mr. John Burroughs' little out-of-door poem called "A Spray of Arbutus," and Mr. J. H. McFarland's "A Story of Some Maples," which is illustrated with many exceedingly beautiful photographs of trees and their flowers, taken by the author.

"The Cow Pea" is the title of the latest publication issued by the Experiment Farm of the North Carolina State Horticultural Society at Southern Pines, N. C. This book neatly bound and illustrated in plain and concise manner discusses the value and uses of this important crop,

the cow pea. Every reader can get a copy free by writing to the Superintendent of Experiment Farm, Southern Pines, N. C.

Chronic Progressive Deafness.

Mayo Collier discusses the form of deafness which occurs insidiously, without pain or discomfort in the ears, and only becomes apparent to the individual when a marked impairment of hearing has taken place. He believes that in the associated conditions of a chronic cold in the head with partial obstruction to nasal respiration there is every factor necessary to produce the condition known as sclerosis of the middle ear. Detailed reasons are given for this belief. Cases taken early can be improved; even cases considered incurable can often be greatly helped. The nose may be quite free, but the septum may have a depression corresponding to the convexity of the lower turbinal body, and on the pharynx there may be patches of atrophy with dilated veins and islets of enlarged gland substance. On trial of the Politzer bag one will probably fail to get air in, but after an antiseptic and astringent wash, perhaps in a week's time, air will enter. The galvanocautery will put a stop to this latent obstruction and relieve the congestion of the nasal and postnasal space by letting in air, and give tone to the vessels. The nose being ventilated and the potency of the Eustachian tube restored, the drum head should be daily exercised by gentle movements imparted by Politzer's bag and Seigle's aspirator. In a large percentage of cases this results in marked and permanent improvement of hearing.—*Medical Press and Circular.*

The following passage occurs in Brydone's "Tour through Sicily and Malta," written toward the end of the eighteenth century: "There are here a number of particular conversations every night, and what will a good deal surprise you, they are always held in the apartments of the lying-in ladies, for in this happy climate child-bearing is divested of all its terrors, and is only considered as a party of pleasure. This circumstance we were ignorant of until t'other morning. The Duke of Verdua, who does us the honour of the place, with great attention and politeness, came to tell us that we had a visit to make that was indispensible. 'The Princess Paterno,' said he, 'was brought to bed last night, and it is absolutely incumbent on you to pay your respects to her this evening.' At first I thought he was in joke, but he assured me he was serious, and that it would be looked upon as a great unpoliteness to neglect it. Accordingly, we went about sunset, and found the princess sitting up in her bed, in an element undress, with a number of her friends around her. She talked us usual and seemed perfectly well. This conversation is repeated every night during her convalescence, which generally lasts for about eleven or twelve days. The custom is universal: and as the ladies here are very prolific, there are, for the most part, three or four of these assemblies going on in the city at the same time."

Medical News and Items.

Virchow is progressing slowly toward recovery.

The smallpox epidemic throughout the West is considered to be the most serious outbreak since 1885.

Cholera is spreading in Manila and in the country surrounding. 568 deaths have been reported to date.

Andrew Carnegie has given $50,000 for the erection of a hospital in Pittsburg to give first aid to injured workmen.

The Battle Creek Sanitarium which was recently burned, entailing a loss estimated at $400,000, will be rebuilt immediately.

A bacteriological laboratory for the study of the plague is to be established at Silvi-Bouron, on the Bosphorous, near Beicos.

Influenza is prevailing to a greater extent than for several years past in London, where it has caused a decided rise in the death rate.

The authorities of Yale College have announced that hereafter the course in the Yale Medical School can be made in three years, instead of four.

Drs. Charles J. Keller and Morris C. Robins, Baltimore, were jointly sued in the Court of Common Pleas for the death of an infant 9 months old. It is alleged that the child's death was caused by the wrongful and unskillful use of chloroform in a surgical operation without the knowledge or consent of his parents.

The eighth annual meeting of the American Laryngological, Rhinological, and Otological Society will be held in the city of Washington June 2, 3 and 4.

The health department of Baltimore has detailed a detective to ride in street cars and warn spitters of the ordinance against expectoration. Later, arrests will be made.

It is stated in the London daily papers that Dr. Ross has succeeded in cultivating the germs of cancer and has produced a malignant neoplasm by inoculating a guinea pig with the culture.

Dr. J. Alison Scott has been elected professor of clinical medicine and therapeutics in the Philadelphia Polyclinic and College for Graduates in Medicine, to succeed Dr. S. Solis Cohen, who resigned about a month ago.

A bill providing for the creation of a separate board for the examination and licensing of persons desiring to practice osteopathy in the State of Virginia has been killed in the committee of the State Senate on general laws.

Surgeon Joseph J. Kinyoun, U. S. Marine Hospital Service, stationed at Detroit since his transfer

from San Francisco a year ago, has resigned, and will reside in Philadelphia and devote himself to bacteriologic work.

One of the measures adopted in the campaign against charlatanry being waged in Germany, is the publication in the medical journals of descriptions of the nature of the most widely advertised quack medicines.—*Exchange.*

McKinley's Doctors' Bills.—The bills for attendance on President McKinley have been formally presented. The sum total is said to be in the neighborhood of $100,000. Senator Hanna will present the bills to Congress for payment.

A hospital car was attached to each of the five trains required to transport the 29th Infantry from Fort Sheridan to San Francisco, en route to the Philippines. This was rendered necessary by the prevalence of measles at the post.

Slim Diet.—"Greater" New York feeds her almshouse inmates at a cost of about ten cents a day. The bill of fare has been bread and coffee for breakfast, bread and stew for dinner, varied by bread and tea for supper. No sugar, butter or vegetables.

Plague in India.—The latest reports from India with regard to the plague, reveal a fearful condition of affairs in some parts of that country. The death rate is appalling. One dispatch to the Exchange Telegraph Company from Lahore, Punjab Province, March 22, places the mortality at 2,000 daily. It is said to be the worst epidemic on record, and the failure of the authorities to check its spread is largely due to the policy of non-interference where caste customs are concerned.—*Med. Record.*

Newspaper Medicine.—The *Virginia Medical Semi-Monthly* for February 21st, cites the following from a country newspaper: Mrs. Thomas —— was operated on this morning at the home of her son Alfred, for necrosis of the bone, by Dr. ——, assisted by Dr. —— and Dr. ——. A piece of dead bone was removed from the tibia of the right eye.

Fatal Accident in Brockville Hospital, Canada.—Miss Mary E. Jackson, 24 years of age, a nurse in training at the Brockville General Hospital, drank mercurial solution on the night of the 21 and died the following day. The bottle was labeled magnesium sulphate and she drank about two ounces. It was, however, a solution of bichlorid of mercury.

Surgeon-General Sternberg has recommended that Contract-Surgeon James E. Mead have a commission as captain and assistant surgeon of volunteers on account of gallant conduct and professional zeal in the Philippines. This action is taken on the recommendation of First Lieutenant Louis Van Schaick, Fourth Infantry, endorsed by General Chaffee and Lieutenant-Colonel B. F. Pope, chief surgeon of the Division of the Philippines.

A New York legislator has introduced a bill requiring that in any operation on a woman in any hospital, medical college or elsewhere, there must be in attendance three of her nearest relatives, who must remain with her until she is returned to bed. There must be absolutely no

exposure other than is necessary for the operation, and the attendance of the relatives, it may be presumed, is to enable them to make any protests or criticisms they may feel called upon to utter if any detail of the operation shocks their sensibilities. It would be interesting to see how such a law would work.

An evening office for medical treatment at moderate prices for the poorer classes will be opened soon, says *American Medicine,* in the central part of Philadelphia, under the management of Drs. Gertrude Walker, Kate Baldwin and Alice Norton. This place has the support of the 1,300 members of the Pennsylvania Association of Women Workers and many well known physicians, and has for its aim the establishment of a middle point between the physician's office and the free clinic to reach a self-respecting class who will not receive treatment at the hospital clinics, and who have not the means to employ a specialist.

Prize Essay on the Dangers from Self-Drugging with Proprietary Medicines.—The Colorado State Medical Society offers a prize of twenty- five dollars for the best essay, for circulation among the laity, upon the dangers of self-drugging with proprietary medicines.

The competition is open to all. Essays must be typewritten in the English language, must contain not more than 3,000 words, and must be submitted before June 15, 1902. Each essay must be designated by a motto, and accompanied by a sealed envelope, bearing the same motto, and enclosing the name and address of the author. The essay receiving the prize will become the property of the society for publication. Others will be returned to their authors. Essays should be sent to the Literature Committee. Dr. A. C. Graham, Secretary, Steadman Block, Denver, Colorado.

Sudden Death Due to Dyspepsia.—Lancereaux states that dyspepsia is an important factor among the causes of sudden death. The physiologists have offered the explanation for sudden death coming after a shock to the epigastrium, that it is due to an excitation of the nervous system. In legal medicine a number of like cases are reported under the term inhibition. A pathological condition of the stomach often plays the same role. A proof of this is the frequency of sudden deaths soon after eating. The writer reports a case of sudden death due to excitation of the nervous filaments of the gastric mucosa. He also cites cases of sudden death in individuals without objective lesion of the heart or vessels, but who are suffering from gastric affections. Diet will often prevent these accidents. If they occur, rythmic traction of the tongue and flagellation will help to combat them. Sudden death may also be due to the condition of the respiratory mucosa.—*La Tribune Medicale,* March 12, 1902.

Preliminary Announcement of the State Society Meeting.

The Society will be called to order Tuesday morning, June 10th, at Wilmington.

The following partial programme will be given:

"Uric Acid Excess," by D. J. Hill, M. D.

"So-Called Dyspepsia," by C. A. Julian, M. D.

"Pulmonary Tuberculosis," by S. H. Von Ruck, M. D.

"Medical Jurisprudence," by J. L. Nicholson, M. D.

"Inebriety," by Chas. Duffy, M. D.

"Smallpox," by J. P. Macon, M. D.

"Public Charities," by S. E. Koonce, M. D.

"Morphinism," by W. P. Ivey, M. D.

"Creosote," by J. B. Wright, M. D.

"Commercialism," by B. R. Graham, M. D.

"Recent Remedies," by W. W. McKenzie, M. D.

"The Urine," by Frank O. Rogers, M. D.

"Appendicitis," by J. M. Parrot, M. D.

"Alcohol,"by C. S. Mangum, M. D.

"Intubation," by J. W. Long, M. D.

"Relief Departments in Railway Surgery," by G. G. Thomas, M. D.

"First Aid in Railway Surgery," by R. B. Miller, M. D.

"Railway Surgery," by J. H. Manning, M. D.

"Practical Anatomy," by Gwilynn G. Davis, M. D., of Philidelphia.

"Cancer of the Uterus," by J. Ernest Stokes, M. D.

"Fibroma of the Uterus," by H. A. Royster, M. D.

"Causes of Gynecologic Disease," by Wm. A. Graham, M. D.

Quite a number of other papers are promised in time for the final programme, which will be issued June 5th.

The annual debate will be opened by A. A. Kent, M. D.

The annual essay, by Eug. B. Glenn, M. D.

The annual oration, by John C. Rodman, M. D.

The programme, when complete, will be more than interesting, and no physician can afford to miss this meeting of the society. Every member should come and bring a friend. The meeting will, so we learn, be held in the elegant Seashore Hotel—by the side of the broad and cool Atlantic. Rates, $1.50 per day.

The following railroad rates will apply from junctional points, viz:

FROM.	VIA.	RATE.
Charlotte	So. Ry., S. A. L.	7.75
Danville	So. Ry.	10.50
Durham	So. Ry.	7.00
Fayetteville	A. C. L.	4.05
Goldsboro	A. C. L.	4.05
Greensboro	So. Ry.	8.70
Henderson	S. A. L., So. Ry.	7.00
Maxton	S. A. L.	4.25
Norfolk	A. C. L. S. A. L.	10.85
Raleigh	So. Ry., S. A. L.	6.55
Rural Hall	So. Ry.	10.10
Sanford	S. A. L., A. C. L.	5.45
Selma	So. Ry., A. C. L.	5.10
Suffolk	S. A. L., A. C. L.	10.25
Weldon	A. C. L., S. A. L.	7.00
Winston-Salem	So. Ry.	8.70

Tickets to be sold June 3d, 4th, 9th and 10th, final limit June 16th, 1902; continuous passage in each direction.

For Warts.

Apply once daily, carefully, by means of a glass rod, one drop of a saturated solution of sodium hydroxide. In two or four days, further application will not be needed.

Or, apply to the top of the wart several times daily, a drop of the acid nitrate of mercury.

Many Notable Cases

Have been cited by eminent Medical authorities,
affirming the goodness of

TONO NERVINE TABLETS

. scientific exhibit
f a combination of
ell known drugs of

RECIPE
Ext. Sumbul .....1-2 gr.
Phosphorus.....1-100 gr.
Ferri Carb.....1 gr.
Ext. Nuc. Vom.....1-10 gr.
Ext. Damiana.....1 gr.
Asafetida .....1-2 gr.
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the highest possible quality and at once recognizable by the therapeutist

As a Most Valuable Nerve Tonic

s a protection to the Doctor these tablets are issued in bottles f 100 only, and we advise prescriptions calling for original ackages.

Samples and Literature on request.

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SUPERIOR TO PEPSIN OF THE HOG
A POWDER PRESCRIBED IN THE SAME MANNER AND DOSE AS PEPSIN, WITH BETTER RESULTS.
A SPECIFIC FOR VOMITING IN PREGNANCY

A Sovereign Remedy in all Stomach Troubles
Valuable as an adjunct to Calomel administration

WM. R. WARNER & CO.

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BALTIMORE SAN FRANCISCO LONDON, ENG.

THERAPEUTIC HINTS.

For Glaucoma.

Polyclinique, March 1st, recommends, in cases of sub-acute or chronic glaucoma, the instillation every evening of one drop of the following collyrium:

℞ Eserine sulphate.....$\frac{1}{100}$ of a grain;
Pilocarpine hydrochloride.3 grains;
Cocaine hydrochloride ..1½ grains;
Distilled water.....150 minims.
M.

In acute attacks two instillations daily may be made.

Local Treatment of Leucorrhea.

The following is recommended by Lutand, to be used locally in treatment of leucorrhea:

℞ Pot. chloratis	℥iss	45
Tinct. opii.....	℥i	31
Aq. picis liq.....	O. ii	596

M. Sig.: One-half a glass to be used in a quart of water as a douche night and morning.

Some Applications of Hot Water.

Headache almost always yields to the simultaneous application of hot water to the feet and back of the neck.

A towel folded, dipped in hot water, wrung out rapidly and applied to the stomach acts like magic in cases of colic.

There is nothing that so promptly cuts short congestion of the lungs, sore throat or rheumatism as hot water when applied promptly and thoroughly.—*Medical Mirror.*

Diarrhea in Tuberculosis.

According to *Pac. Med. Jour.,* the following is of great service in checking diarrhea in tuberculosis:

℞ Ichthoform	gr. v	33
Tannalbin		
Bismuthi subgal-, āā .....gr. x		66
Codeinæ sulph. .....gr. ¼		015
Olei menth. pip.....m. ¼		015

M. Ft. chartula No. i. Sig: One such powder every two to six hours.

An Ointment for the Pruritus.

The *Gazette hebdomadaire de medicine et de chirurgie* for February 23d attributes the following formular to Brocq:

℞ Lanolin .....1 ounce;
Petrolatum .....1½ ounces;
Menthol ....10 grains;
Carbolic acid.....12 grains;
Salicylic acid .....2 drachms;
Zinc oxide.....5 drachms.
M.

The Disease, the Patient, or the Remedy?

Cod-liver oil still remains incomparably the most efficient remedy in prolonging the lives of the victims of phthisis pulmonalis. In scrofula, strumous caries, and chronic arthritis, its powers are often signally displayed.

ALFRED STILLÉ, M.D., LL. D.,
Prof. Emer. of Theory and Practice of Med. in University of Pennsylvania.

Has this experience been yours, Doctor? If not, why not? The specific pathogenesis of the disease is essentially constant. The human system is affected in a manner sufficiently uniform to justify us in ignoring the individual personality. What, then, is the reason for the variation in therapeutic results? Why do some enjoy success, and others suffer failure? Is not the *form* of medication the most influential factor in our remedial efforts? The clinical data derived from actual experience furnishes the most trustworthy solution of the problem. In the laboratory preparation of predigested cod-liver oil, known as "HYDROLEINE," theoretical hypothesis has been confirmed by practical reality. Factual proof, secured by faithful and repeated experimentation, supports us in our assertion that "HYDROLEINE" represents a cod-liver oil as closely resembling the product of physiological fat digestion as science can produce.

Formula of HYDROLEINE:

Each dose of two teaspoonfuls contains

PURE NORWEGIAN COD-LIVER OIL, - - -	80 m.
DISTILLED WATER, - - - - - - - - -	35 m.
PURE PANCREATIN, - - - - - - - - -	5 gr.
SODA BICARBONATE, - - - - - - - -	⅓ gr.
SALICYLIC ACID, - - - - - - - - -	¼ gr.

SOLD BY DRUGGISTS GENERALLY.

A sample of Hydroleine and also literature will be sent free, upon application, to any physician (enclosing professional card) in the United States.

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Newer Materia Medica.

Original Communication.

Written for Carolina Medical Journal, by E. Leo di Mazzini, A. M., M. D., D. Lit and Sci., F. T. S., M. S. M. A., Jackson, Mich.

In that nervousness resulting from excessive and exhaustive brain work, and other causes which bring on such conditions, as insomnia, prostration, and its sister disorders, I have never found anything of such incalculable benefit as Celerina (Rio) in conjunction with electricity.

It is not like many so-called tonics, a mere temporary stimulant to the heart, and then a depressant, but from what I know by its repeated application and use, it is permanent in its effects. It, to my mind, approaches the nearest to an ideal tonic of anything I ever knew, for unfortunately too many of our so-called tonics are merely temporary heart stimulants, leaving bad after-effects and not a tonic in the proper sense of the word, as a tonic proper should not only stimulate but also feed and nourish as well, in order to do any direct good. This latter effect is what I have invariably experienced with Celerina. I have also obtained brilliant results from its uses in paralysis and alcoholism. In dyspepsia with nervous debility, I am in the habit of combining it with Fes. Ext. Hydrastis, and always get curative effects. In alcoholic catarrh of the stomach I combine with S. H. Kennedy's Extract of Pinus Canadensis.

In Bright's disease and diabetes, of which I make a specialty, I find no agent to equal Celerina. My combination is as follows:

℞ Celerina (Rio)..... .....
Lithiated Hydraugea āa .... ℥viii

M. Sig.: One dessert spoonful four times daily.

Sanmetto in Genito-Urinary Troubles and in Diseases of the Mucous Membranes of a Chronic Character.

I do not generally endorse proprietary medicines, but Sanmetto is such an elegant combination that I must make an exception in its favor. I have used several bottles of it in my practice with the most gratifying and surprising results. I used it in a case of inflammation of neck of bladder. Have also used it in several other cases and will say that I have never used any preparation which has given me such satisfactory results in genito-urinary diseases as does Sanmetto. I am afraid that the druggist, in one case, substituted the elixir of saw palmetto, which they have tried to have me use instead of Sanmetto, as it did not taste as it should, but I have tried so many preparations of saw palmetto with no beneficial results, that I want the genuine Sanmetto or none.

H. G. Peck, M. D.
Racine, Wis.

Vapo-Cresolene

Cures while they sleep.

Whooping Cough, Croup, Asthma, Coughs, Colds, Catarrh, Bronchitis, Grippe.

An antiseptic, antispasmodic and prophylactic, to be vaporized for the treatment of **Whooping Cough, Croup, Bronchitis, Asthma, Diphtheria** and kindred diseases of the throat and air passages.

It takes time to prove the value of a remedy: CRESOLENE has over twenty years behind it and the assurance of a vigorous and growing demand, besides the personal acknowledgment of many physicians, that it is the best remedy, particularly for **Whooping Cough** and **Croup** ever introduced. The application of CRESOLENE is simplicity itself. The Vaporizer acts from five to six hours without attention. The patient breathes the medicated air of the room. The treatment being by inhalation does away with the necessity of waking the patient, which, in itself, is of sufficient importance to warrant giving it a trial. **CRESOLENE may be used in connection with any other treatment,** and is used with success in the treatment of **Diphtheria, Scarlet Fever** and **Measles.** When used for the two former diseases and Membraneous Croup a tent should be built around the bed. CRESOLENE is a product of coal tar, of much greater antiseptic power than carbolic acid. Send for descriptive booklet, containing physicians' testimonials and price list.

NOTICE.—Physicians will be allowed a liberal discount, express paid on first order, and money back if not satisfied.

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WHOLESALE=RETAIL.

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Write us and have your order booked for fall delivery. It will astonish you how cheap we sell.

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A Systematic Alterative Effect.

The following from *Gaillard's Medical Journal,* by Dr. A. H. Ashley, of Boston Mass., will interest our readers because of the original way in which he expresses his pronounced admiration for something tried, trusted and not found wanting. The letter was written to our old friends, The Antikamnia Chemical Company, and reads as follows:

Gentlemen:—Your various combination tablets, as well as antikamnia tablets, have been used by me for a number of years, and I can only say that they have uniformly given me the best results. But, my dear sirs, why have you waited so long to give us the very best combination of them all? I, of course, allude to your "laxative antikamnia & quinine tablets."

If there is anything known to the medical profession which will take their place in that class of diseases, where one wishes to relieve pain and control the temperature and at the same time produce, by laxation, a systematic alterative effect, it has not been my good fortune to find it. In those cases of severe neuralgia, and particularly in ovarian and menstrual pain, where morphine was our only hope (and where, after its administration, we had indigestion, bowels bound up, nausea, habit, etc.), you have in Laxative Antikamnia & Quinine Tablets a remedy which will, my experience has taught me,

replace morphine and meet all requirements.

I am slow to be carried away by enthusiasm for any drug or combination of drugs, but I freely and voluntarily confess that in these tablets you have given to the profession a remedy so effective and reliable in its action that it offers good excuse (or a mitigating circumstance anyhow) for a little effusion from one who, as a general thing, is not given to gushing.

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Dr. D. Hirsch.

Krakau, Galicia, August 17, 1901.

Crime and Education.

Education is, perhaps, the most prominent factor in the suppression of crime. The most highly cultured and intelligent nations have lass crime than those which occupy a low position in the scale of civilization. The London *Spectator,* of a recent date, has an article on the above subject, in which it says:

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property are safer in Scotland than in Sicily, and though race and creed may be, in part, the causes, still the latter, at least, must be one of the results of comparative intelligence. Crime, more especially violent crime, on the whole, diminishes with the spread of education, though it must be admitted that in some countries, especially France, there are ugly breaks in the completeness of the evidence. The stupid are often cunning, and there is in the ignorant a disposition toward violence, which the late Mr. Hutton, a keen observer of mental peculiarities, always traced to a consciousness of mental weakness, and its resultant, a wish to manifest strength in some direction, and so preserve self-respect.

"The educated are naturally better aware of consequences, and are, simply because they have been trained, less liable to be carried away by those fierce waves of excitement, the causes of which are still not completely traced. . . . The drunken rough is more disposed toward outrage than the drunken gentleman, because the latter retains more completely some relics of intelligence. The evidence of those engaged in education is, we believe, nearly unbroken in the same direction."

In this country the truth of these remarks is being constantly demonstrated. Deeds of unbridled violence occur more often in the Southern States than elsewhere in America. It has been recently shown that illiteracy is more common not only among the negro population of that section of the continent, but also among the whites, than in any other portion of the United States. Race and climate have important bearing on the matter, but it would seem that these sink into relative insignificance beside that of education. Ignorance does not mean innocence; but, on the contrary, evidence goes to show that where ignorance predominates there will vice and crime flourish exceedingly.—*Medical Record.*

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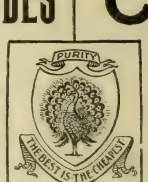

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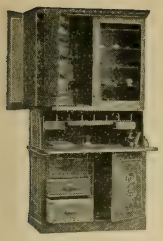
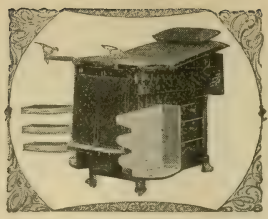
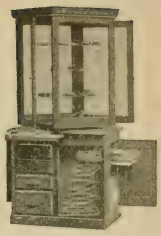

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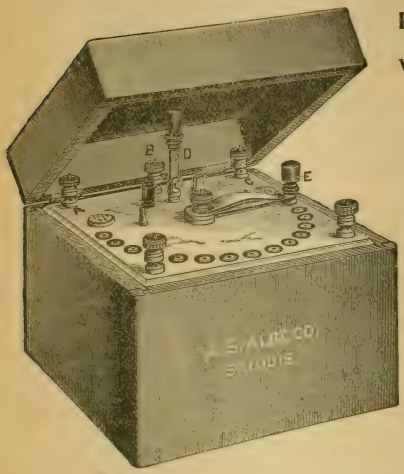

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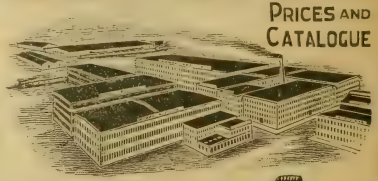

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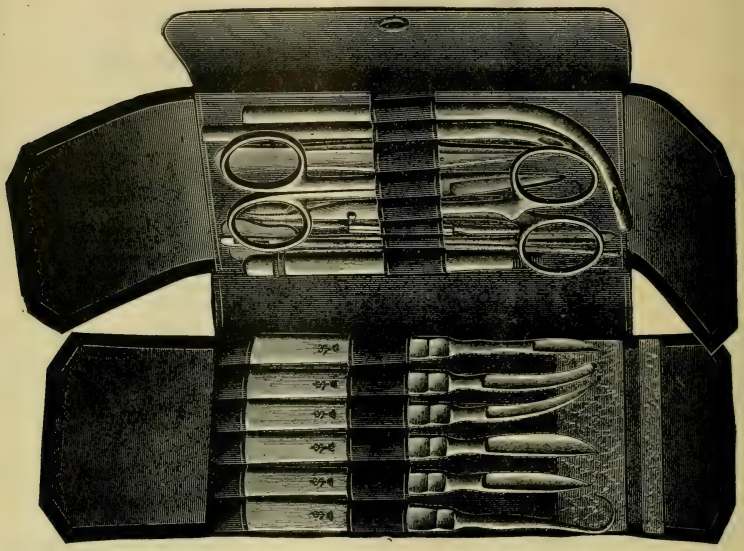

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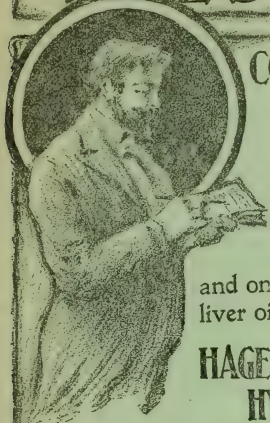

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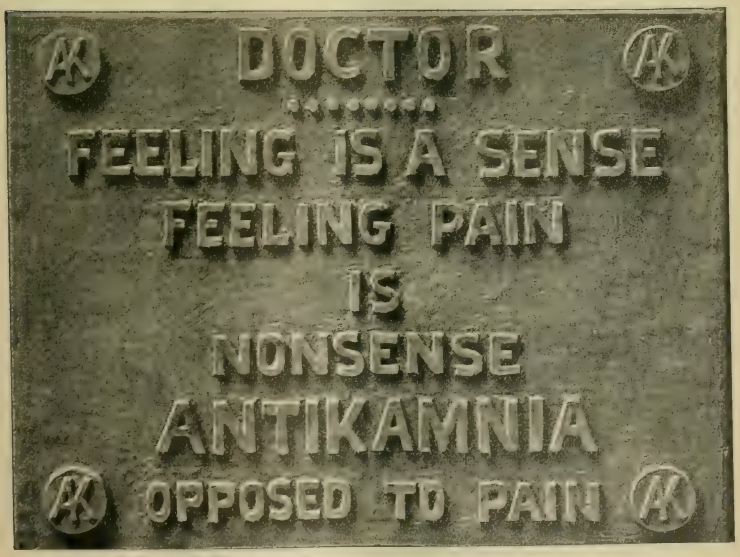

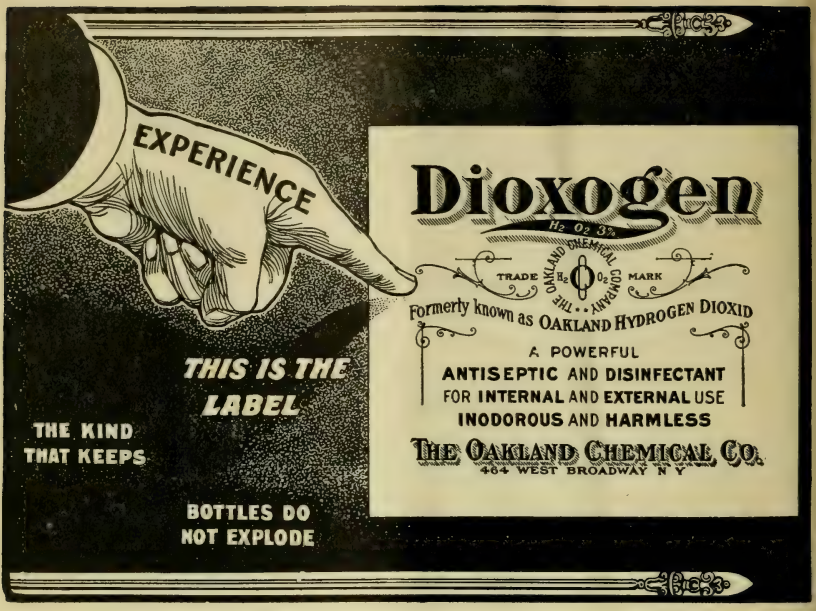

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Suing Hospital Patients.

Dr. George R. Fowler, of Brooklyn, recently brought a number of actions against patients who had received professional services at his hands, and who, when bills were presented to them, declined to pay on the ground that they were patients of the hospitals, and that the doctor's services were rendered as a servant of the institution. Dr. Fowler said that he had merely brought the suit to put a stop to a general imposition on physicians by persons who can, but will not pay for medical attendance. The actions were brought in the Second District Municipal Court in Brooklyn, and eight of them came up for trial one day last week. The amounts ranged from $50 to $600. Two of the actions were settled by the defendants before they were called. In all of the others either judgment was had for the plaintiff or an adjournment was taken.—*Med. Record.*

Gastralgia.

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Dysentery.

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The Carolina Medical Journal.

A Monthly Journal of Medicine and Surgery.

VOL. XLVIII. CHARLOTTE, N. C., JUNE, 1902. No. 6

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EDITORIAL.

THE DOCTOR AS AN INVESTOR.

Physicians are universally reckoned as poor financiers, and it must be confessed that object lessons of the truth of this statement are always close at hand. They show as a rule, little judgment in making investments, with a tendency to the speculation rather than the saving method of acquiring wealth. They are a favorite mark for the mining and oil promoters, who flood the country with their proffers of wonderful speculative opportunities. Our attention was recently called to this subject by the perusal of a lecture on "Opportunities," seen in a stray copy of a financial journal. Whatever may have been the merit of the lecture in other respects, it must be admitted that the lecturer appraised the business abilities of medical men with considerable acumen.

"Take the medical profession. After the doctor's practice becomes large, his mind is constantly on his duties and only by some fortunate investment that he is practically pushed into does he ever become wealthy. Very few physicians when they die leave anything for their widows and children. Their usefulness on earth seems to be absorbed by others to the detriment of their own. Speaking of this, the *New York State Journal of Medicine* recently published an account concerning one of the best known physicians in New York who recently died. A man with a reputation in two continents, who reached the acme of his fame and had far more than the average use of extreme prosperity, yet, when his estate was computed, great surprise was expressed on every hand on finding that he had managed to save during a long and busy life only the earnings of two or three years. The same occurrences can be noticed every day. Physicians die, leaving their daughters and sons to eke out an uncongenial existence as teachers or stenographers.

"The business training of physicians is to quite an extent responsible for this. Each one does a vast amount of charity work for which he gets no pay and little credit; and this is especially true of the men who have an appearance of prosperity from the relative size of the fees they do collect. He is a poor collector, sending out his accounts at infrequent and irregular intervals and creating the not unnatural impression that he does not need the money. Small wonder then that the family medical bill is paid only after all other reasonable family desires have been satisfied."

The lecturer also makes the point that it would show more business instinct in a professional man to control, what he calls a false pride, in an expensive and luxuriously furnished office on a fashionable thoroughfare, and a costly turnout, while he used the difference in money between these and more modest quarters and equipage in some interest-earning channel. This, he claims, is better, even though the former outlay may help him to a somewhat more exclusive practice.

While the profession of medicine should not be regarded as *per se* a means of acquiring wealth, it is well occasionally, for the doctor to take a look at such matters from the standpoint of the worldly-wise.

OPERATIONS FOR HEMORRHOIDS.

A recent abstract in *American Medicine* reviews the results of several operations for the cure of hemorrhoids. The after-effects of these operations would seem to be reasonably satisfactory; thus in 85 cases in which the clamp and cautery or ligature was employed the percentage of permanent cures was 88, while 8.4 per cent were much improved, and in only 3.6 per cent was the result unsatisfactory. Of 67 cases operated on in a German clinic by excision after the plan suggested by Whitehead, there was only one case of recurrence. In the same clinic 27 cases were operated upon with the clamp and cautery, a permanent cure resulting in 19, while 7 were greatly relieved, and a return took place in only one. This small difference in the percentage of relapses between the clamp and cautery and the more thorough, but also more difficult method of excision, is hardly sufficient to popularize the latter at the expense of the former operation, except when it is desirable to remove the entire pile-bearing area. The clamp and cautery is perhaps the simplest, quickest and safest plan devised for the care of the average case of hemorrhoids. Excision is the ideal method of removal, and in some few cases the only possible cure, but requires more skill, and a careful attention to technique.

The recent volcanic eruption at St. Pelee, Martinique, demonstrates in a fearful manner the helplessness of man in the presence of the gigantic forces of nature. This latest instance of wholesale destruction far transcends the similar performance of Mt. Vesuvius, so famed in history and literature. It is believed that many of the inhabitants of the ill-fated West Indian town met immediate death as a result of poisonous gases, which show how easy a matter it would be to destroy human life in this manner. Science has not

yet evolved a method sufficiently practical for using this means of inflicting death in war, but there is little doubt that such will ultimately be the case. The writer of a forceful story has pictured the invasion of the planet Earth by the inhabitants of Mars, who, by means of what is called "heat rays" and chemicals contained in bombs, which on explosion produce a dense and poisonous gas, proceed to burn and destroy everything in sight. About the time when the annihilation of the descendants of Adam seems inevitable, our much-abused microbes get in their work upon the new-comers, who, having no ancestral or personal immunity to sustain them, speedily fall victims to the micro-organisms of earth.

The Carolina Medical Journal takes pleasure in announcing that Dr. W. O. Nisbet, of Charlotte, N. C., will hereafter be connected with the Journal in an editorial capacity, and we feel confident in predicting that this addition to the literary and editorial staff will prove highly satisfactory. Dr. Nisbet is a man of large practical experience, and in his special line has enjoyed unusual advantages of study, both at home and abroad. He is devoted to his profession and interested in all that pertains to the wellfare of his medical brethren. For this and other reasons unnecessary to enumerate, he is particularly well fitted for the work he has undertaken.

A Marvellous Recovery.

Mikinoff reports a case of a girl, sixteen years old, who was received at the hospital in an unconscious state with eleven incised wounds. Two penetrated the lungs and three the abdominal cavity. One of the thoracic wounds was above the right clavicle, the other above the left mammary gland between the third and the fourth ribs. The wounds communicated with the external air. The largest wound of the abdomen was 12 cm. long and on the median line below the umbilicus. Through it protruded the wounded pregnant uterus, and through the latter the shoulder of the child. To the right, above the anterior superior spine of the ilium, there was another horizontal wound 7-8 cm. long. Through it protruded several loops of the small intestines and between them the arm of the child. The intestines were scattered on the extremely dirty shirt. The third wound, 2½ to 3 cm. long was under the right hypochondrium and through it protruded a considerable piece of the omentum. The other wounds were located on various parts of the body. (The girl was so brutally dealt with by her brother, who wanted to save the family from disgrace). A Cesarian section was performed at once and the wounds closed. The only antiseptic cleansing done was by means of pledgets of cotton immersed in alcohol. The operation lasted for two hours, during which she received one liter of normal salt solution. She was removed from the table pulseless and treated with subcutaneous injections of camphor oil and hot bottles. The girl made an uninterrupted recovery, save a pleurisy which lasted eight days and was accompanied by a slight temperature elevation. This case illus-

trates what may be accomplished by timely surgical aid even in hopeless cases, and the author emphasizes the necessity under such conditions of operating at once without paying much attention to the details of antisepsis or asepsis. If he had delayed the operation by antiseptic preparation, the patient no doubt would have died on the table.—*Modern Medical Science.*

Some Reasons for Considering the Veriform Appendix as a Gland.

Clarence L. Killborn, in speaking of the development of the appendix, says that it is first seen at the sixth week as a part of a lateral diverticulum, which also forms the colon. This is about the time that the diverticulæ are given off to form the other glands. In the structure of the appendix, far more important than either serous or muscular coats is the submucous layer. It forms the greater part of the appendix and is the bulk or body of the whole structure. This predominating tissue is lymphoid in character. Histologically, the appendix resembles the tonsil, and a microscopical section looks not unlike a tonsil surrounded by a thin muscular coat, and penetrated by a central canal. The appendix may be regarded as an inverted or involuted tonsil. In location and structure the appendix bears the same relation to the pancreas as the tonsil does to the salivary glands. The germicidal properties of the tonsils and their protection of the pharynx are well realized. And in the appendix we must recognize an organ having a similar structure and capable of doing a similar work in its own territory. Its situation is particularly adapted to act upon the contents of the colon, its secretion being able to act immediately on the food as it passes through the cæcum. In considering the pathology of this organ, similarities are noticed toward the diseases of the recognized glands. The writer thinks that the appendix should be accorded a rank equal to that held by the tonsils or salivary glands.—*Med. Record.*

Thirty-one years ago, says the *Journal of the American Medical Association,* while living in Tennessee, a resident of Granger, Texas, who had been holding the spring of a clothespin between his teeth, accidently sucked it into his trachea, whence it passed into the right lung. During all these years it caused symptoms much resembling phthisis. He died, however, after a stroke of paralysis. The autopsy revealed the spring, consisting of six coils, three-fourths of an inch long and one-third of an inch thick, embedded in the right lung, which was about one-third its normal size.

"The difference between my husband's club and mine," said the pretty woman in the turquoise-colored toque, looking at her watch, " is that mine lasts from two until six, and his lasts from six until two."—*Life.*

Dr. Champlin says that when in doubt as to whether you have a case of gonorrhea in a female, remember that the pus of specific vaginitis is alkaline. Litmus paper will decide the diagnosis.

The Carolina Medical Journal.

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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the profession are solicited for publication.

ORIGINAL COMMUNICATIONS.

President's Address.*

Robt. S. Young, M. D , Concord, N. C.

Gentlemen of the Medical Society of the State of North Carolina:

To have been chosen to preside over this session of the North Carolina Medical Society is an honor for which I am truly grateful. Here and now I desire to assure you of my cordial thanks for your kind partiality in electing me to this office. As your president, I shall not be able to measure up to the high standard set by my distinguished predecessors, but I yield to none in my earnest endeavor to maintain the excellence of our organization. As this session is likely to prove the largest meeting of our society in many years, it should, and I hope will, result in lasting benefit to all.

I congratulate you, gentlemen, upon the fact that we have again assembled in Wilmington. Wilmington has the reputation of knowing how to treat friend or foe. As early as 1765 a ship carrying stamped paper was boarded in Wilmington harbor in broad daylight, by five undisguised citizens (Ashe and others) who threw the stamps overboard and compelled the Royalist Stamp Master to take an oath that he would not attempt to enforce the odious tax. Why should we talk of the Boston tea party, when here in this city five patriots held a stamp party, eight years earlier, under the shining sun of heaven and without any disguise whatever.

Ten years ago we met here and

*Delivered before the meeting of the North Carolina Medical Society at Wrightsville, N. C., June 10, 1902.

were the recipients of that hospitality for which the people of Wilmington are proverbial. Since then, they have again proved themselves worthy sons of their illustrious sires of 1765. The "Wilmington revolution" has become a part of the history of North Carolina. We are assembled in a city where the proud feet of the Anglo-Saxon keep time to music of the progress of the new century. As we walk these streets, we shall not escape the enthusiasm that comes of contact with the heroic. I congratulate you, gentlemen of the North Carolina Medical Society, that we meet together under such happy auspices. The gates of the city are opened wide in welcome to us. The clasp of manly hands and the smiles of fair women will make happy memories of our sojourn in the "City by the Sea." While here, place yourselves in care of nature's great physician, old Ocean; bathe your bodies in its waters—the panacea of all the ages—water that cures but does not inebrate. Let the balmy breeze of the Atlantic cool your brow; let the mermaid's song lull you to seep and then perchance you may dream of a land where night calls never come and where all patients pay in advance.

It is our proud boast that the North Carolina Medical Society through the board of medical examiners, has done excellent work in raising the standard required for admission to practice. The quack and charlatan have no place in North Carolina. This result has been brought about by the conscientious and painstaking work of the men whom you have placed upon that board. One of the most important duties that confronts the society at this session will be the election of a new board of medical examiners to serve for six years. I think it would be superfluous to comment at length upon the wisdom of this change back to the former method of electing the entire board at one time for six years instead of having the personnel of the board subject to the caprice of the bi-ennial elections. Let us put on guard at the portals of our profession, men who are fair but fearless, men who will see to it that no man lacking in skill or character shall be licensed. Let us elect men able in the science of healing rather than skilled in the arts of the politician. The citizens of North Carolina who have charged us with this responsibility, demand that we exercise the greatest prudence in this important matter and from the abundance of available material, select our best men. In this way shall the high standard we have fixed, be maintained, and in this way only. A more universal enforcement of the medical license law is necessary. Permit me to say, as has been repeatedly suggested before, that we should not expect local physicians to take the initiative in prosecuting persons practicing without license. Invariably the cry of persecution is raised and the quack receives consideration and sympathy to which he is not entitled. This society should appoint a committee to act for the entire State, to bring these cases to the attention of the solicitors of the State and to secure counsel where necessary, to prosecute these offenders.

The State board of health continues to deserve the support of the

profession and to merit the gratitude of the whole people in its efforts to prevent the spread of disease. Yet it must be confessed that the sanitary progress of the State is not entirely satisfactory. This is due to no fault on the part of the board of health, but to the indifference of the individual members of the profession. In the matter of making prompt reports to the county superintendents of health, of all contagious diseases there is woful neglect. Physicians also fail to do their whole duty when they do not thoroughly impress upon the families in which these diseases are found, the utmost importance of observance of quarantine regulations. The medical profession cannot afford to disregard the laws of our State which makes it a misdemeanor for physicians to fail to report contagious diseases, so as to prevent spread of epidemics.

The members of the profession have not profited by the offer of the agricultural department to make free biological examinations. Lest the fact of this offer may have escaped the attention of some, I will take this oportunity to state that the department offers to deposit with the county superintendent of health, mailing cases for specimens of sputum, specimens from suspected cases of diphtheria and specimens of blood in doubtful cases of fever. These specimens will be promptly examinend and reported on, thus enabling you to determine the true nature of the disease. In the interest of scientific progress and in behalf of humanity, let us see to it that the agricultural department shall no longer have to make complaint that we do not appreciate these biological examinations. I am advised that if we do not show more appreciation of this offer, there is danger that it may be withdrawn.

At the St. Paul (1901) meeting of the American Medical Association a new constitution and by-laws were adopted. The American Medical Association earnestly requests the co-operation of our society in its reorganization. The officers of that association ask me to bring the matter before you. I herewith transmit the correspondence and beg you to authorize a special committee to consider this subject and report during this meeting. Being anxious to have our State represented at the first meeting of the House of Delegates of the American Medical Association which is now in session at Saratoga Springs, I have taken the liberty to appoint two eminent members of this socity as delegates. These gentlemen will act until their successors are elected.

I regret to announce that since our last meeting the Pittman prize has been withdrawn by the heirs of the donor. This is greatly to be deplorel. Let us hope that the day is not far distant when we shall have another prize to be awarded for original research.

Without trespassing further upon your patience, I must ask your forbearance with my own imperfect qualification and your generous assistance in the discharge of the responsible duties you have imposed upon me.

Treatment of Typhoid Fever.*

By A. A. Kent, M. D., Lenoir, N. C.

Of the long category of diseases that we have to combat, enteric fever is admitted to be one of the most serious in many respects. It seems that in recent years it has become more prevalent throughout the country. From every county in the State, and from almost every community in every county, comes up the report of its presence during a considerable part of every year. We are all familar with it, and can recall recent experiences in which our resources, energy and endurance, have been severely taxed in its management. We are now just upon the eve of the season of its greatest prevalence. I can think of no topic of discussion to which we may devote an hour more profitably, than in exchange of views on the treatment of enteric fever.

The subject naturally resolves itself into several minor topics and queries, any of which will afford opportunity for remark. I shall not exhaust any one of them—and I was about to say, myself on any one of them; but merely open the discussion by taking up as seemed to me most important, leaving others entirely untouched. I shall then ask you, gentlemen, to make this annual discussion what it was designed to be, a full, free, off-hand discussion of a subject of general interest to us all. I cordially invite every one who feels an impulse to do so, to "speak out in meeting." What you have to say may be just what I, or some one else, may need to know. You will not have done your part, if you fail to say it.

Can Typhoid Fever be Aborted.

This is the first query that I propound to you. I will give you my opinion, and "the reason for the faith that is in me," and ask you for yours in exchange. I have seen a good many cases abort, or rather, I may say, terminate within fourteen days. But there is no specific treatment that may be relied upon with any degree of certainty to do this. Granted that we have a specific toxemia, as the cause, we should not expect specific results from the use of any medicine, like the definite action observed in a chemical laboratory. Some cases, like the summer shower, are quickly over, while others, like the rainy day, are slow to recover; while yet others, under the same treatment, will terminate fatally. These different results are due in part to the degree of intensity of the specific infection. But is as much due to the *vis natura* and healthy organism of the individual. One person has the ability to combat, or to eliminate, the toxemia from the system with facility and is but lightly affected, if at all. Another person is defective in these respects, and is more seriously affected. One case has feeble digestion and a predisposition to gastritis, another has faulty organic structure of the glandular organs, another of the heart or lungs. All these and many other factors, to say nothing of environments, are to be taken into account, and play a more important part in the duration and ultimate termination of any case, than the superiority of any one so-called treatment. When we remember that we have all this diversity of individuality

*Read before the Medical Society of the State of North Carolina at the Wilmington meeting June 10-13, 1902.

to contend with, we are likely to get better results if we have a like diversity of remedial agents with which to combat the disease.

Specific Medication.

Have we any specific remedies with which we may combat the germs of the disease in the system? I think we have such remedies. I am a firm believer in intestinal antisepsis and elimination, not according to the Woodbridge formula, but by means of such remedies, given at such times and in such doses, as are best suited to the case in hand. My experience with the Woodbridge treatment in a limited number of cases was not very satisfactory. The principle of disinfection and elimination is correct; but I can adapt the treatment to the case in hand, better than to try to follow the formula of another. The remedy that one practitioner gets the best results from may not be so efficient in the hands of another. We do not use them just alike. Treatment should be begun with a good dose of calomel, epsom salts, or some vegetable cathartic sufficient to effectually clear out the alimentary tract. This should be repeated in smaller doses every second or or third day, up to the latter part of the second week. After that time I use once a day enemata of warm water in which ten to fifteen drops of spr. of turpentine is dissolved. If this fail to keep the bowels open, I still use some mild purgative. As an intestinal antiseptic, I usually give Listerine or Park-Davis Euthymol, thirty drops in water every three hours. I have obtained satisfactory results from tincture of iodine and carbolic acid ½ m. of each, well diluted with water, every three hours. In some cases this combination disagrees with the stomach. I have then used carbolic acid alone and found it to agree better. I have sometimes used Salol, 2½ to 5 grains every three hours, but cannot say that I have been especially pleased with it. Sulpho-carbolate of zinc in five-grain doses every four hours has given me very satisfactory results. I have used Thymol in five grain doses, in capsules, every four hours, with good results. I should not fail to make honorable mention of the time-honored remedy, spirits of turpentine, in this list. I regard it as an excellent remedy, given in ten to fifteen drop doses, in emulsion every four to six hours; but preferably used in the form of Stupes over the abdomen. The system is in this way easily saturated, as it is readily absorbed. It is well for one to be familiar with the use and action of several of these remedies; for he will often find that the one he may begin with will not be well borne by the stomach, and he will have to change. After a few days use of one of them, with mild purgatives, there is, as a rule a general amelioration of all the symptoms. The temperature range will be considerably lowered; the tongue cleans and become moist; food taken and better digested; tympanites is prevented; diarrhoea checked; headache and delirium relieved, and the patient rests better. Whether or not any treatment is capable of effecting a germicidal influence upon the bacteriological forms implanted in the deep tissues throughout the organism, is questionable. But it is easy to understand how it destroys, or renders less virulent the bacilli typhosis, so abundant in the alimentary tract. At the same time,

much of this toxic matter is being swept out by the purgatives and enemata before it is absorbed and carried into remote tissues. But after we have done what we may with specific treatment, there are a great many symptoms that must yet be treated upon the expectant plan.

Hydrotherapy should rank first in order along the line of expectant treatment. I cannot say much for the cold bath, as it is not easily carried out in general practice; nor would I dare to say much against it, in the face of the great array of statistics in its favor. I will ask some of those present, who have had more experience, how to carry it out safely, if it may be, in general practice, where the help of trained nurses is not to be had, and where we cannot see our patients oftener than every second day. I use, with much comfort to my patients, frequently repeated sponge baths when the temperature range is high. I instruct the nurse to sponge the patient all over, as he lies in bed, several times a day with tepid water. If he is weak and much exhausted, I have a little alcohol added to the water. This sponging conduces to the quiet and comfort of the patient and helps to control the fever and delirium.

High temperature may be best controlled in hospital practice by systematic cold bathing, but in private practice we cannot carry it out, and must resort to other remedies. During the first and second week, one or two small doses, three to five grains, of phenacetine, or acetanilid may be safely given, except in cases of weak heart. It quiets nervousness, relieves headache, and lowers the temperature for a few hours after each dose. It should not be kept up too long, and should never be given in cases with weak pulse, or where there is extreme exhaustion. In such cases, I have seen large doses, twenty to thirty drops, of tincture of digitalis given every six to twelve hours, slow and strengthen the pulse, reduce the temperature range and relieve tremor and delirium. As digitalis is cumulative in its effect, the dose should be gradually reduced as its action is observed. If the temperature does not exceed 103 degrees F., especially when the morning remission is considerable, it does not demand any special antipyretic treatment. I have never been able to get satisfactory results from the administration of quinine, except in cases of malarial complication. In some cases of prolonged high temperature and delirium a full dose of morphine or pulverized opium at bed time, will give a quiet night's sleep, slow and strengthen the pulse, and break the course of prolonged high fever.

Diarrhoea and hemorrhage. Where the patient is properly dieted and intestinal antiseptics used, diarrhoea is the exception and not the rule. I have found bismuth subnitrate, and some form of opium to be the best means of controling it. I have had very poor results from the use of mineral and vegetable astringents, such as acetate of lead and tannic acid. Intestinal hemorrhage is a very grave symptom and demands a fuller consideration than I can give to it at this time. It is best controlled by perfect quiet in bed, with-holding food, and the administration of full doses of opium.

Stimulants as a rule are not needed, especially with young patients, whose previous health and habits have been good. Alcoholic stimulants should

not be given as a matter of course, in a routine kind of way. In old people, and those of feeble constitution, it should be given carefully and systematically, provided it does not irritate the stomach. It should be administered in all cases where there is great general prostration, weak and irregular heart action, and pulmonary complications. Its effects should be observed closely, to make sure that it is not interfering with digestion, irritating the stomach, and helping to produce gastritis, a most serious complication. In ordinary cases, one-half ounce of whiskey or brandy every three hours is sufficient. In extreme cases, a much larger amount should be given. I have found coffee to be a very good stimulant, especially in cases that are disposed to stupor. It may be given with milk, equal parts of each, thus combining stimulation and nourishment in a form that is easily digested and agrees well. Coffee as a stimulant has the advantage of not having to be repeated at frequent intervals, the stimulating effect lasting from four to six hours. Where continued support of a weak fast heart is necessary, tincture of digitalis, ten to twenty drops, every six hours, is the most reliable remedy. It is slow in action and cumulative in effect, hence its use should not be delayed too long when indicated; and the dose should be reduced, or the interval lengthened, when the pulse has been sufficiently slowed and strengthened. It sometimes disagrees with the stomach. When it does this tincture of strophanthus may be given in its stead, three to six drops every four to six hours. It is quicker in its action and of shorter duration, and not altogether so reliable an agent as digitalis. When a very powerful stimulant is needed, there is nothing equal to strychnia given hypodermically. It is a valuable tonic and stimulant, given per orem, where there is not much tendency to diarrhoea. It should be given in 1-60th to 1-30th grain doses every four hours. It is an invaluable remedy in the slow convalescence from typhoid fever.

Food should be systematically given every six hours during the first week of sickness; every three hours in day time and every four hours during the night, during the second and third week. In grave cases where the amount taken at a time is small and the prostration extreme, pre-digested food should be given every two hours. The amount should be regulated by the digestive powers of the individual. I am of the opinion that fever patients are often over-fed, and that much of the gastric indigestion, diarrhoea, tympanitis and other bad symptoms are due to over-feeding. Milk is for many reasons the most reliable article of food. There are many ways in which it may be given. When it disagrees, as it will do in a considerable number of cases, I use soups and broth. The white of egg and water with a little wine or whiskey is usually very well borne and is especially good in cases with very irritable stomach. No solid food should be administered during the sickness, or for more than a week after the temperature has reached the normal. Rectal alimentation is of great help in cases of irritable stomach or much nausea and vomiting. A cleansing enema of warm soapy water should first be administered. After it is voided, a nutritive enema should be given. Inject

high up and give, not more than four or five ounces, of some liquid food that may be easily absorbed, such as liquid peptones, soups, broth, or white of egg and water. Milk is not good, as the lower bowel will not digest it. Stimulants and some kinds of medicines are easily given in this way, provided they are well diluted.

Prophylaxis and disinfection. Remove from the sick room, if it can be done, all unnecessary furniture, carpets, rugs and bed-clothing. Instruct the nurse to open the doors and windows several times a day and air the room well, the patient being protected from draughts by proper covering. The bed linen and clothing used by the patient should be changed every second or third day, sometimes oftener. Too frequent changing disturbs the patient, causing a rise of temperature and sometimes other troublesome complications. The linen, etc., should be dipped in a 1-1,000 bichloride solution and then well boiled in washing.

All glasses, spoons, plates, cups, wash bowl, etc., used by the patient, should be set apart for the sick room, or thorughly disinfected in a strong carbolic acid (1-50) or bichloride solution (1-1,000) before being used by other persons.

All discharges from the bowels, urine, vomited matter, etc., should be received into a vessel containing a strong disinfecting solution. I ordinarily provide the nurse with bichloride of mercury in 60 grain powders; and instruct her to use one powder to a gallon of water, kept in a one or two gallon jug. This makes approximately a 1-1,000 solution. Some of this solution is to be kept all the time in the chamber mug and other like receptacles. Disinfection of the room after the patient is convalescent is best done with formaldehyde gas. One pint to the 1,000 cubic feet of space should be sprinkled in the room. The room should first be made as near air tight as possible and kept shut for twelve hours after the formaldehyde is sprinkled in it. Care should be taken that all closets opening into the sick room should be opened for this disinfection.

Good nursing is of paramount importance to both physician and patient. Many a physician has been robbed of his otherwise well-earned success by the ignorance or baseness of a bad nurse. It is no unusual occurrence for a bad turn in the patient's case to be caused by some act of officiousness on part of the meddlesome neighbor.

Good nursing means neatness, gentleness, cheerfulness, quietude, hopefulness, comfort, diminished suffering to the patient. To the physician it supplies accurate and systematic administration of medicine and reports of the case in his absence. It requires tact, alertness, intelligence, and involves grave responsibility.

It is a very common assertion of old men in the profession, that they use less drugs in the treatment of typhoid fever with their advancing years of experience. This is in part due to a better knowledge acquired by experience of the drugs that are really helpful and of a better understanding of how to use them. But it is also largely due to their faith in former treatment and methods of treatment being shaken or entirely destroyed by more recent methods of investigation and observation, and

their inability to master the new methods of treatment, and lack of knowledge which begets lack of faith in new remedial agents. No young practitioner should be misled by this into doing nothing for his patients, with the idea that they will probably do just as well with little treatment. He has been employed to do something, to act, to benefit, to relieve, to cure that patient. If he fail to do precisely the right thing at precisely the right time, he is derelict in his duty, and is responsible for any bad results that may follow. He should not be lulled into inactivity with the comforting idea that treatment does very little good in any disease. He is not in charge of any case of serious sickness as a figure-head. He is the representative of the highest skill and learning of the medical profession, and should measure up to it. The general practitioner should carry with him constantly these high ideals of professional duty.

Infant Feeding.*

By G. A. Ramsaur, M. D., China Grove, N. C.

Balmy spring is upon us and nature, with her intense heat and foul air is approaching near, and I thought it would not be inappropriate to discuss the momentous and perplexing subject of infant feeding. It is so vast a subject it is impossible to cover every point.

There is not one of us whose patience and skill has not been taxed and baffled in giving a regimen that would nourish this multitudinous class of humanity. Even nature fails often to do her part well, and the physician with his skill has to come to her assistance.

In the great majority of these cases nature supplies the food from the breast of the mother, and, perchance, you may deem a discussion of this section of the subject superfluous, but, as I have said, nature's supply is sometimes faulty, and there are many officious and careless mothers who are too prone to add to nature's regimen, and the doctor has to be called to remedy the trouble.

The baby will tell the physician whether nature's diet is the proper food. If the baby gains about an ounce in weight per day up to the third month; if its bowels are regular and the stools of the proper color and consistency; if it eats well and sleeps the greater part of its early life, the mother as well as the doctor, knows the milk is adequate in quantity and quality. Yet, where is the physician who has not met with many cases of breast-fed infants whose increase in weight is below the normal, who suffer with either constipation or diarrhoea, and who makes life miserable for himself and all concerned. Baginsky has divided nature's supply of food into fats, carbohydrates, proteids—casein, albumin—salts and water, in certain proportions, and the supply should be abundant.

Holt says in building up the tissues of the body the proteids take first place, the carbohydrates the second and the fats the third. In the production of animal heat the fats come first and the carbohydrates second. In a proper diet all of these elements are represented. The salts

*Read before Rowan County Medical Society at the meeting in April.

and water are no less important, as you can readily see. Holt says the average infant during the first year requires a little more than six times as much water as an adult.

If the baby is sick, nature is at fault either in the quantity or quality of her food, or both. If the child nurses 40 or 50 minutes, it is strong presumptive evidence that the quantity is small. If the supply is abundant, the child should be satisfied in 10 or 20 minutes. If the quantity is at fault there is no trouble about supplying it artificially; but how is the physician to determine what elements are deficient? If the quantity is short, the quality is likely poor. The condition of the breast will help to enable the physician to determine as to the milk supply or quantity, but the most reliable tests is to weigh the child before and after nursing. The difference in the weight is the amount swallowed. Under three months, an infant should weigh three ounces more after nursing; five and six months, eight ounces. The test is not practicable, however. The cream gauge may be sufficiently accurate for clinical purposes to determine fat. The proportion is so constant it may be ignored. We have no method of determining the amount of proteids clinically. Chemical analysis is the only way to estimate the solids and only accurate method for all the ingredients. The solids may need to be increased or diminished; the fats may be at fault and too high or too low; the carbohydrates may be abnormal. The specific gravity will throw some light on the solids. If it is very high, the solids are in excess—provided the fats are not low. If the fats are low, the specific gravity would be high, if the proteids were not in excess. You may say a chemical analysis is not feasible, but there is no other method to learn accurately what elements are low or in excess. The State provides for the analysis of suspected wells for the public good, and she could confer no greater boon than provide this much-needed means. We know that excessive fats and proteids both cause gastro-intestinal symptoms in the nursing infant, but it is often difficult to determine which is in excess or too low. A mother reports her baby has diarrhoea and curds of undigested casein in stools, and Holt says curds in the stools are the most reliable evidence that the proteids are in excess, but if the fat is below the normal, casein is digested with difficulty and the result is the same as though the casein were in excess, and the doctor is in a quandary what is the best to do. A chemical analysis would make things clear, for often inperfect digestion of a normal amount of solids gives the same symptoms as an excess.

If the mother is feeding her infant under three months old, starches of any kind in addition to breast milk, a thing they often do, and the child is suffering from gastro-intestinal trouble, we know what to do, for Baginsky has demonstrated the bile of nurslings under three months old contains less of the various acids in proportion than the adult, and digests starches badly. The deficiency of bile renders the fermentative process much more frequent and of greater intensity, in nurslings than in adults. It is very essential that the proteids

and fats be kept up to the standard. Flint says the infant manufactures its albuminous proteids for its ever-growing body from the casein of milk. Nitrogenous alimentary matter may be said to serve principally for the development and renovation of the living tissues. Fats are easily oxidised, yielding heat chiefly, and belong, therefore, to the calorifacient group. Pavey says though fats, *per se*, cannot supply what is required for tissue development, they take part in the process. The conditions affecting the composition and supply of mother's milk are age, number of pregnancies ,acute and chronic diseases, menstruation, excessive venery —McNairy—diet, mode of life and drugs.

If the deficient ingredient in milk is known, it may in a measure be remedied by following Rotche's table: The total quantity being small, increase liquids of mother's diet, milk, malt extracts, etc., and encourage her to believe she will be able to nurse her child. If the total quantity is in excess, decrease liquids of the diet. The total solids being low, shorten nursing intervals, decrease the exercise, decrease the proportion of liquids and increase the proportion of solids in the mother's diet, and vice versa, if the total solids are in excess. If they are low, increase the proportion of meat in the diet. If proteids are low, decease the exercise. If the proteids are excessive, increase the exercise up to the limit of fatigue for the mother. If the mother is anemic, give iron, out-door exercise, albumin diet, milk, eggs and meat.

Fischer says a preparation known as neutrolactin, tablespoonful dose before meals is good. Grandin and Jarmin, in their text book on obstetrics, recommend a strong inf. galega officinalis when the flow of milk is scant. Bruner has shown the two mamary glands of the same woman may yield somewhat different milk. Different portions of milk from same sitting may have different compositions. The first is always poor in fat. Becqurel says milk of blonds contain less casein than that of brunetts. Fischer says women of weak constitutions yield milk richer in solids—especially casein—than women with strong constitutions. In women 15 to 20 years, greater quantities of proteids and fat and smaller quantity of sugar. The smallest quantity of proteids and greatest quantity of sugar is found at 20 to 30 years of age.

The milk of primiparae is richer in water with a proportionate diminution of the quantity of casein, sugar and fat than in multiparae. The influences of menstruation seem slightly to diminish the milk sugar and to considerably increase the fat and casein.—Fischer.

Holt says if the child is not gaining in weight and no special signs of indigestion, increase all the ingredients; if habitual colic, diminish the proteids; for frequent vomiting after feeding or nursing, reduce the quantity; for regurgitation of sour masses of food, reduce the fat and sometimes also the proteids; for obstinate constipation increase both fats and proteids. If the baby is nursing it must be aided artificially, of course. The sugar is least likely to produce dyspeptic troubles of any of the elements. The proteids come first and

the fats second. Holt says the proteids may have to be reduced as low as 0.25 per cent. if the infant is very delicate. The fat 1.02 per cent, rarely more, and for a short time it may be essential to reduce below 1.00 per cent. If the fat is low, a good cream mixture with barley water will remedy the defect. If proteids are low, a mixture of milk and barley water properly diluted. If fats or proteids are in excess, diluent of barley or oatmeal water render milk more digestible. If the mother's milk with artificial aid can not be digested and assimilated, a wet nurse with normal milk and whose child is near the age of the patient is best. The same rules as to diet, habits, care of infant, etc., apply to wet nurse as to mother.

Jacobi says milk deficient in sugar is frequently a source of constipation in a child.

All authorities concur that weaning should be gradually begun between the 8th and 10th months.—Fischer; 6th and 9th months.—Holt; 10th and 12th months.—Smith. Sudden weaning is apt to cause acute indigestion, especially if the artificial food is not sufficiently diluted with proper menstruum. All writers agree that weaning should be avoided during hot weather, especially in cities, but the danger from weaning is not so great as continuing at the breast with milk that is totally unfit both in quantity and quality. Fischer says weaning is imperative when the mother becomes pregnant. All authorities concur that pregnancy produces changes in milk in quantity and quality; Holt says the fat especially, but it is not known, however, that there are any other differences. Smith states the milk of pregnant women frequently contains the vicid substance which characterizes colustrum. Holt says the weight of the child should be the guide as to the time of weaning. A stationary weight for several weeks renders weaning advisable; a steady loss makes it imperative. Acute diseases of mothers demand sudden weaning of child and on no account should the child be allowed to suckle an inflamed breast. In diseases of short duration the pump should be used to maintain the flow of milk till recovery. When the mother's milk is deteriorated in quantity and quality from any cause, a change should be made. If the child has not arrived at age to wean, a wet-nurse should be procured. If a wet-nurse is not practicable, cow's milk properly diluted. The milk at first should be diluted more than the age of the child would warrant until it becomes accustomed to its new diet, when it may be gradually increased until it corresponds in strength for a child its age. In weaning, the child should be at first fed two or three times per day, withdrawing the breast at night and increasing the food daily until it is entirely weaned. If Holt's statement that the milk of pregnant women is poorest in fat is true, a good cream mixture properly diluted is the best; for child one month old, 2.00 per cent; 4 months, 3.50 per cent.; 9 to 12 months, 4.00 per cent. After a child is successfully weaned, he should be treated as a bottle-fed infant. Sometimes a child refuses to take food; then rectal or nasal feeding should be instituted. Over-feeding and too frequent feeding in a child

just weaned will often precipitate a violent attack of dyspepsia. After three months the amylolytic function is fully developed and the starches can be added in small quantity. The hours for feeding are 6, 10, 2, 6, 10. Fischer says the meal in the morning should be 8 ounces pure cow's milk; second, 5 ounces milk and 2 barley water; 2 p. m., 8 ounces cow's milk; 6 p. m., 6 ounces milk and 2 ounces barley water; 10 p. m., 8 ounces milk, if child is awake. The milk should not be skimmed, but thoroughly mixed, before the barley water is added. Each feeding of milk should be poured into clean bottles and stopped with ordinary cotton stoppers. Milk should be heated to one hundred degrees before feeding. When constipation follows this diet, two ounces of oatmeal water should be substituted for barley water; when bowels are regular and child is pale, much good can be done by adding two ounces of almond water to milk instead of barley or oatmeal. If a severe form of constipation with cheesy curds in the stools exist, then the milk should not be steamed, but given in raw state.—Fischer. If this does not relieve, one or two ounces of chicken or beef soup once a day will often be effective. Fischer then adds one-half ounce of oatmeal gruel with butter or some hominy and butter at morning meal, and half dozen teaspoonfuls of junket before the evening meal. Instead of giving water for thirst, give prune juice, orange juice or apple sauce on different days. As in bottle-fed infants from birth, it will be found necessary, owing to gastric derangements, to frequently discontinue milk. Some of the peptonized foods should be tried. When diluting with any of the farinaceous waters, they should always be dextrinized, it helps split the curds of the casein, reducing them almost as fine as human casein and is especially indicated when first making the change from human to cow's milk, which has a heavier and harder casein. After a child is one and a half to three years old, its heaviest meal should be the noon-day meal.

In bottle-fed infants it is now the fad to pasturize or boil milk before feeding, to render it steril and more digestible. Frendenrich in *Bacteriological World,* December, 1901, has demonstrated by experiment that milk in raw state possesses remarkable germicidal properties, controverting the idea of the profession and laity that milk must be boiled to insure the destruction of all microbes and render it more easily digested. According to his experiments the bacillus of cholera when put into raw cow's milk, dies in an hour; the bacillus of typhoid fever succumbs at the end of twenty-four hours, other germs dying at various periods. At a temperature of 130 degrees milk loses its germicidal powers. Milk also four or five days old loses its germicidal properties. Boiling milk produces chemical changes in the albuminoids and renders it hard to digest; an infant using it frequently suffers with constipation. Nature furnishes her milk raw at body heat. Vasiliff, in *Therapeutic Gazet,* 1890, claims to prove by experiment on six healthy individuals from 18 to 23 years of age on an exclusive diet of fresh raw milk for three days followed for three days by boiled milk, the assimilation of the

nitrogenous elements of the boiled milk to be considerably less than fresh milk, though the difference is less marked than in the case of fats. His conclusions are that the nutritive value of boiled milk is inferior to raw milk. His explanation of this is by the hypothesis of Schmidt that certain parts of the casein of cows milk is transformed into hemialbuminose by boiling. Dr. Dickerson, of St. George's Hospital has shown that children hand-fed by the various artificial foods suffer much more frequently from scorbutic affection and he attributes this to the exclusion of of fresh raw milk, which, he claims, is antiscorbutic. Fischer says we know a great many children fed on pasturized milk develop scurvey. He considers raw milk properly diluted the best diet. Rundelet says the reason children fed on boiled milk develop scurvey, changes take place not in the fat, albumin nor sugar, but in the albuminate of iron, phosphorous and possibly in the fluorin, vital changes take place. These albuminoids are certainly in the milk, derived as it is, from tissues that contain them and are present in a vitalized form, as proteids. The globulin or proteid molicule is coagulated on boiling and which splits away from the inorganic molecule and renders it, as to the iron and fluorin, unabsorbable, and as to the phosphatic molicule, unassimilable. This is the change that is so vital, and this only takes place when milk is boiled, according to Fischer. It is evident that children demand the ferric and phosphatic proteids in a living form and they are only found in raw milk. Then it seems best to imitate nature and use raw milk, as mother's milk is neither boiled, sterilized nor pasturized. Cheadle maintains that phosphate of lime is essential not only to the development of the bony tissues, but to every tissue; that no cell-growth can take place without earthy phosphates.

In starting bottle-fed infants on their food, let us put them on raw milk and keep in mind that carbohydrates give least trouble to the digestive tract and the fats and proteids most. The proteids for the first few days should be very low in per cent., not over 1.00 per cent, and sometimes as low as 0.25 per cent., according to Holt. In fact, the first one or two days of infants' life, Holt recommends only a sugar solution. Let us keep in mind human milk contains 1.50 per cent. proteids; cows' 4.00 per cent., or nearly three times as much. We can readily see if we do not reduce well the casein by dilution, adding the carbohydrates and fats gradually, we will have trouble. The fat for very young and delicate children should also be reduced. 4.00 per cent is normal, 2 per cent. is sufficient to begin a baby three or four days old on, and 6.00 per cent sugar. The average fat of cow's milk a baby can digest is from 2.00 per cent. to 4 per cent.; sugar, from 5.00 per cent. to 7.00 per cent., as the sugar in cow's milk is less than human milk, sugar must be added. Should this be milk sugar—lactose—or cane sugar—sucrose? Dr. E. E. Bush maintains there is a great difference in the milk sugar of commerce and sugar as it exists in milk. They are regarded by chemists as the same. This, Dr. Bush, claims, is a mistake,

and misleads the physician. Sugar in milk is all assimulated and the milk of commerce, when added to baby food, is eliminated both by the kidneys and bowels. He asserts he has demonstrated this by numerous experiments. J. O. Braithwaite has found a number of samples that contain a high residue of ash, which coagulates milk at boiling point. Jacobi insists on the addition of cane sugar and agrees with Biedert, who uses it in his mixtures. Cane sugar is twice as strong as milk sugar. A small amount of sugar given extra will often relieve constipation, but it is contraindicated in cases of wind colic from fermentation with green and sour-smelling stools. Fischer says an absolute discontinuance of sugar in the food for a short while is best in these cases. He advices from one-half to one teaspoonful of glycerine in each feeding instead, especially when constipation precedes the colic.

Council deems soda added to milk unauthorized, and should not be tolerated from the fact the salt transforms the sugar into lactic acid, which gives rise to lactate of soda, a laxative soda salt that often causes diarrhoea in children.

When we meet with a case that cannot digest cow's milk, however diluted, for a time it is best to stop milk altogether and try some of the artificially predigested foods. In severe cases, it is at times best to give no food at all for twenty-four hours. In returning to food, Gaertner's mother's milk should be tried. Its composition seems more nearly in accord with human milk.

Asking your pardon for having taxed your patience so severely, I close.

Two Cases of Ectopic Pregnancy.*

By D. A. Stanton, M. D., High Point, N. C.

It is not my purpose to enter into the history or pathology of ectopic pregnancy, but to simply report two cases coming under my recent observations and refer to one or two of a remote date to show that this is a condition occurring more frequent than is recognized by the general practitioner.

Case first: Mrs. R., age about 37, sent for me for the relief of pain in the right iliac region. At this first visit I elicited little of interest and prescribed for what I took to be some menstrual irregularity; this was early in the morning. At 3 p. m., I was hurriedly called to find my patient in profound shock. I gave morphine and strychnine hypodermically and whiskey by the mouth, which soon brought her up to a safer basis. About this time I was called out of town for three hours and did not see my patient again till 9 p. m. At this visit I found her all alone and in much better shape than when I left her, six hours before. Believing there was something of a serious nature on hand, I made a thorough investigation of the case, which I had not done before, she being a stranger and somewhat reticent, I had learned but little of her till this visit.

She told me she had missed two periods, and believing herself pragnant, had made up her mind that she would not have any more children, did on a previous night pass a lead pencil into the womb. This act I accepted as the cause of all the trouble before

*Read before meeting of the Tri-State Medical Society of Virginia and the Carolinas at the Asheville meeting, February, 1902.

me and believed that I had a perforated uterus, as a result of the use of the pencil. There was also present a slight discharge from the womb, but no dilitation of the os, and only a slight filling of the pelvis, if any, could be detected. She passed a fairly comfortable night, but on the next day she had another attack of pain and collapse. After rallying from this, her condition remained about the same for three days, some fever, acceleration of pulse, nausea and vomiting, and scanty flow. The pelvis meantime having filled and become tender to pressure. At this time I called one of the physicians of my town into consultation; he diagnosed pelvic cellulitis. Not being satisfied in my own mind nor willing to rest on the pinion of my colleague, I wired Dr. Long, of Salisbury. After getting a history of the case, his diagnosis was ectopic pregnancy, the pencil act to the contrary notwithstanding. Hurried preparations were made to catch the next train for Salisbury, where the patient was taken and operated on at the Sanitarium of Whitehead & Long. The operation abundantly proved the diagnosis.

This was a case where rupture took place about the eleventh or twelfth week.

Case second: Mrs. B., age about 35, had been sterile for eleven years. After missing two periods, she was taken with acute pain in the left side. The family physician was called and prescribed for the relief of pain. Next day after this visit a scanty flow set up, with recurrent attacks of pain requiring repeated doses of morphine.

This state of affairs continued for ten days. During this time and by the end of the ten days ,there was considerable enlargment of the abdomen, with tenderness on pressure. The physician in charge not being satisfied with the progress of the case, asked me to see the patient with him, which I did on the tenth day subsequent to the first attack of pain. There was present a slight elevation of temperature, pulse 90, constipation, icteroid condition of the skin and conjunctiva, a scanty discharge *per vagina*, in pelvis choked and a prominent point excessively tender in left iliac region.

My diagnosis was ectopic pregnancy, to which the attending physician assented. After explaining to the husband the nature of his wife's malady, he asked for other and more experienced help. This was readily assented to, and Dr. Long was wired for. After converting the parlor into an operating room, and preparing the patient, her abdomen was opened. The abdomen and pelvis was found filled with blood. Left tube was ruptured; apart of placenta was intact. No foetus was found. In this case rupture took place about the ninth week. I should say both of these cases made a complete recovery.

The cases I wish to refer to and about which I knew nothing at the time they came under observation are as follows:

First: A negro woman about 30 years old, had been sterile for three years. She had missed her periods for two months when she was suddenly siezed with excruciating pain in right side of lower abdomen. The history of this case is parallel to case second, on which a section was done, except I waited two full weeks, all

the time practicing masterly inactivity (except to give an occasional dose of salts and morphine). At the end of two weeks there was such a bulging into the vagina that I concluded there must be pus near the surface in the cul-de-sac. Under chloroform I proceeded to cut as little as possible and gouge a good deal with a blunt instrument till I got an opening through which there was discharged a large quantity of debris. In this case I used no drainage tube or gauze, but relied on frequent douches. Suffice to say my patient made a good recovery, even if I did not know what was the trouble till years afterwards.

Union by Primary Intention.*

By Stuart McGuire, M. D., Richmond, Va., Professor of Principles of Surgery and Clinical Surgery, University College of Medicine; Surgeon in Charge St. Luke's Hospital; Visiting Surgeon Virginia Hospital, etc.

All wounds heal by surgical regeneration, but union is said to occur by primary intention if suppuration is absent, and by secondary intention if pus is present.

Inflammation is undoubtedly due to germs, and text-books tell us that wounds that heal by primary intention are those which are aseptic and those which heal by secondary intention are those which are infected.

This is obviously untrue, as experiments have proven that as far as practical surgical work is concerned, absolute asepsis is an unattainable ideal. The bacteriologist has been able to demonstrate imperfections in the most rigid technique and the result leads us to the conclusion that all wounds are infected.

*Read before the Richmond Academy of Medicine and Surgery, May 13, 1902.

If this be true the manner in which a wound heals does not depend on the absence or presence of microbic life, but on the preponderance of the pathologic potency of the germ on the one hand and the physiologic resistance of the tissues on the other. In other words, if the power of resistance is greater than the forces of attack inflammation does not develop and the wound heals by first intention; while if the force of attack is greater than the power of resistance inflammation does develop and the wound heals by secondary intention.

The question of how to secure union without suppuration is therefore reducible to a mathematical proposition; lessen the potency of the germ, or increase the resistance of the tissue; practically one endeavors to do both. The potency of the germs must be estimated both qualitatively and quantitatively. It is to be minimized by the method of modern aseptic and antiseptic surgery. Fortunately the most virulent species of micro-organisms inhabit material that can be completely disinfected, and the germs that exist on soil not capable of absolute sterilization can be so reduced numerically as to be comparatively harmless.

It is not the object of this paper, however, to discuss the methods employed to destroy the life of germs, but the purpose is to call attention to the equally important subject of the means to preserve the resistance of the tissues. The writer believes that in surgery, at least, cleanliness comes before godliness, but he does not think that cleanliness is everything. So much has been said and written about infection and so little about

resistance, that the surgeon, in his efforts to secure the one, frequently fails to endeavor to maintain the other. For the best results both objects should be constantly held in view, and one not sacrificed to the other without good and sufficient cause.

When infection takes place the process that follows is commonly spoken of as a battle between cells; really it is more. The germs effecting localization undergo multiplication and produce toxins. The tissue meets the attack of the invader with phagocytes, alexines and antitoxins.

Phagocytes are normally present in the blood. When suppuration threatens, their number is largely increased, as if nature, by phagocytosis, called for conscripts to defend her soil. Phagocytes grapple in physical hand to hand combat with the microbes. If the phagocyte is the victor it kills the germ, takes it into its substance and utilizes it as food. If the germ is the conqueror it kills the phagocyte, enters its body and employs it as a culture medium.

Alexins are normally present in the blood serum. They are the most powerful of all the non-toxic germacides. They give the serum an antiseptic power, equivalent bulk for bulk with a 1-10,000 solution of bichloride of mercury. Alexins act on the microbes chemically, and perhaps are as potent in the inhibition or destruction of bacteria as are the phagocytes themselves.

Antitoxins are not found normally in the body, but are produced by the organism in some unknown way after infection has taken place. They have no effect on the germ but on the toxin produced by the germ. Antitoxin combines with a toxin as an alkali does with an acid, neutralizing it and rendering it inert.

The constitutional effect of an infection depends on the proportion of the toxin formed by the microbe and and the antitoxin formed by the system. If the antitoxin is deficient there is fever; if it is equivalent, there is cure; if it is excessive there is immunity.

The importance of the physiologic resistance of tissue to infection is generally known, but its augmentation or even its preservation is frequently neglected by the surgeon, who, in his enthusiasm over the details of aseptic and antiseptic technique, treats the body as if it were a test tube, unmindful of the fact that the fate of the wound depends not only on what he puts into it, but also on what he takes out of it. The highest degree of physiologic resistance of tissue is to be secured by proper constitutional treatment of the patient before the operation and by skillful manipulation and judicious management of the wound during the operation.

When time permits, a case should receive more preparation than the usual routine purgation, starvation and sterilization. The body should be acclimated to bed life by confinement; the nervous system should be fortified by moral, and if necessary, medicinal measures; the heart and lungs should be examined and faulty action or diseased conditions corrected; the digestive functions should receive careful attention and put in good condition by diet or drugs; the emunctories, especially the kidneys, bowels

and skin, should be investigated, and if healthy, should be made active; the blood should be demonstrated to contain its proper percentage of hemoglobin and correct proportion of corpuscular elements; freedom from constitutional diseases like malaria should be assured, and in fact, the entire system raised to its highest possible perfection, for the physiologic resistance of the individual serums and cells depend on the functional activity and physical condition of the body as a whole.

The local treatment, or the manner of making and the method of managing a wound, is even more important than the constitutional treatment, or the preparation of the patient. It is here that the personal element that goes to make a good surgeon comes into play, for a skillful operator with a poor technique will often get better results than a clumsy operator with a good technique.

Aseptic and antiseptic methods are the result of laboratory experiments and capable of definite expression. They are mechanical and can be mastered by any, and practiced by all. Surgical skill, however, is different. It cannot be taught but must be acquired. The essential qualifications are rapidity, a trait gotten by heredity; manipulative dexterity, an art gained by practice; and surgical judgment, a talent developed by experience. While no fixed rules can be laid down the following general statements are true.

A wound should be made quickly and closed quickly, as long exposure devitalizes the tissues and lessens their resistance. A wound should be sufficiently liberal to permit necessary manipulations through it without mechanical injury to its surface, as a long clean wound heals quicker than a short bruised one. A wound should have its hemorrhage arrested by the gentlest means that will prove effective. Fine sutures for the large vessels, tortion for the medium, and gauze pressure for the small ones. Bites of ligatures and bites of forceps are to be avoided when possible. A wound should not be irrigated unless contaminated, as the cells absorb fluid, become bibulous and edematous, and lose their vigor. Awound should not be disinfected unless certainly infected, as germicides kill cells as well as bacteria. If infected it should be left open and drained until lose their vigor. A wound should should be united so as to leave no dead spaces for the accumulation of fluid. Sutures should effect approximation without strangulation. A tight stitch kills, and is a more frequent cause of suppuration than lack of aseptic precaution.

Dysentery.

℞ Potass. et sod. tartrat. sat. sol ℥ ii.
Tr. opii. camphorat. . . . . ℥ ss.
Syr. rheii aromat. . . . . ℥ iv.

M. S.: 2 drachms every hour or until two or three evacuations are produced. In later stages, when there is much blood and tenesmus:

℞ Extr. opii . . . . . gr. i.
Extr. hymiciaosi . . . . . gr. ii.
Extr. belladonnæ . . . . . gr. ⅛.

M. ft. Suppes No. 1. S.: Repeat as required.

There are certain characteristics that all admit to be excellent in their way, but that few persons regard as serious and binding duties to cultivate. Accuracy is one of these.—*Philadelphia Ledger.*

THE NORTH CAROLINA MEDICAL SOCIETY.

The forty-ninth annual meeting of this society was held in Wrightsville on July 10th to 12th, and was an enjoyable occasion. While the attendance was good it was not so large as was expected. The Seashore Hotel on Wrightsville Beach was a great inducement to attend the meeting, but the date was too late by nearly three weeks, and many busy doctors could not attend by reason of summer sickness among their clientelle. The papers presented were of more than usual interest, and many were ably discussed.

THE NEW BOARD OF EXAMINERS.

The following, given in the order of highest vote, were elected on the board of medical examiners, to serve for the next six years: Drs. Frank H. Russell, of Wilmington; M. H. Fletcher, of Asheville; J. M. Parrott, of Kinston; C. J. O'Hagin Laughinghouse, of Greenville; George W. Pressley, of Charlotte; A. A. Kent, of Lenoir, and J. T. Battle, of Greensboro.

OFFICERS FOR THE NEXT YEAR.

President, Dr. A. W. Knox, Raleigh; Vice-Presidents, Drs. E. A. Moye, of Greenville; C. A. Julian, of Thomasville; W. W. McKenzie, of Salisbury; J. L. Nicholson, of Richlands; Secretary, Dr. J. Howell Way, of Waynesville; Treasurer, Dr. G. T. Sikes, of Grissom.

The chair made the following appointments: Orator, Dr. J. H. Manning, Chapel Hill; Essayist, Dr. E. A. Moye, Greenville; Leader of Debate, Dr. A. S. Pendleton, Warrenton.

Board of Censors: Drs. Frances Duffy, New Bern; W. H. Whitehead, Rocky Mount; H. P. Battle, Raleigh; W. P. Whittington; Asheville; W. H. Wakefield, Charlotte.

Legislative Committee: Drs. R. H. Lewis, Raleigh; T. E. Anderson, Statesville; P. L. Murphy, Morganton; J. W. McGee, Jr., Raleigh; J. F. Highsmith, Fayetteville.

Obituary Committee: Drs. B. K. Hays, Oxford; W. C. Galloway; Wilmington; J. W. Jones, Goldsboro.

Delegates American Medical Society: Drs. E. C. Laird, Hot Springs; E. B. Glenn, Asheville; E. Goodman, El Pasco; D. A. Stanton; High Point; J. C. Walton, Reidsville.

NORTH CAROLINA EXAMINING BOARD.

The following are the questions put to the applicants for license at Wrightsville, and out of a class of 86, 72 passed satisfactory examinations.

Materia Medica and Therapeutics. —Edward C. Register, M. D., President.

1. What are the medical uses of guaiacol?

2. What is diphtheria antitoxin? Give dose and method of administration.

3. What is the action of aconite on the heart?

4. Give symptoms of antimony poisoning.

5. What medicines are incompatable with calomel?

6. What does a Seidlitz powder contain?

7. Describe the physiological action of heroin.

8. How would you treat a case of arsenic poisoning?

9. How many minims of tr. of opium are equal to one grain of powdered opium? How much paragoric is equal to one grain of powdered opium? What is the equivalent strength of morphia in each?

10. What is the differential diagnosis between alcoholic narcosis and uremic unconsciousness?

Anatomy.—Dr. J. Howell Way, Waynesville, N. C.

1. With what bones does the longest bone in the body articulate?

2. Describe the inferior radio-ulnar articulation?

3. Describe the right ventricle of the heart?

4. Trace the course of the blood current from the right auricle to the great toe.

5. Locate the valves of the heart in relation to the external surface of the chest wall?

6. Describe the ischio-rectal fossa?

7. Describe the nerve which supplies motion to the muscles of mastication?

8. Given a moderately distended bladder, how far above the symphisis pubis may an incision be made through the abdominal wall without injury to the peritoneum?

9. Outline the course of the radial artery on anterior surface of forearm?

10. Describe the male urethra?

Physiology.—Dr. T. E. Anderson, Statesville, N. C.

1. Describe a complete nerve; (a) Name different kind of fibres and function of same; (b) Do nerves possess the power of generating force in themselves? Explain.

2. Describe source of saliva; name ferment and uses; also chief nerve supply; (a) Does increased vascularity increase the flow of saliva?

3. The organs of Corti, where found, and supposed function?

4. Define glycogen, where found, its uses and destination.

5. Is respiration purely a voluntary act? Explain.

6. What effect follows section or injury of the semilunar canals?

7. Explain nervous mechanism of deglutition; mention nerves concerned.

8. Give reaction of pancreatic juice, ferments, and part played in digestion by each.

9. Source of the corpuscles of the human blood; relative number of each; their office; what is diapedesis?

10. Where and how do the various types of food, when digested, enter the blood?

Surgery, D. T. Tayloe, M. D.

1. What are the anatomical varieties of hemorrhage? What are the clinical varieties of hemorrhage? What is the general or constitutional treatment of Hemorrhage in cases of collapse or threatened death?

2. Describe the general principles to be adopted in ligating arterial trunks in continuity, whether for injury or disease.

3. What are the indications for laparotomy in abdominal wounds?

4. Under what circumstances may careful sounding fail to detect stone? How may vesical calculi be treated, and what circumstances guide you in the choice of operation?

5. Classify fractures of the skull. What is the pathology of fracture?

6. Give the differential diagnosis between supra-condyloid fracture of the humerus, and backward luxation of the radius and ulna.

7. Name the dislocations of the hip joint. What symptoms characterize the backward luxations?

8. Compare briefly the symptoms and lesions of arthritis and synovitis?

9. What is septicæmia? In true septicæmia how does the blood in general become infected?

10. How do you prepare patients for the administration of anæsthetics? How do you administer ether? Under what circumstances is chloroform preferred to ether?

Examination of Albert Anderson, M. D., Wilson, N. C.

Obsetrics.

1. Describe the management of labor in twin births and mention the main points for consideration.

2. Difference between abortion and premature labor. Indication for the induction of either, and the methods employed.

3. Taxæmia in pregnancy. Tell what it is and give prophylaxis and treatment.

Pediatrics.

1. Adenoid growths. Give etiology, pathology, symptoms, diagnosis and treatment.

2. Pavor nocturnus. What is it and from what does it proceed?

3. Meningitis. What produces it? Give its symptoms, prognosis and treatment.

Gynecology.

1. Give the different ways of making a physical examination and the positions of patient.

2. Give details of preparing a patient for an abdominal operation.

3. Acute gonorrhœal endometritis. Give cause, symptoms, diagnosis and treatment.

Practice of Medicine.—J. C. Walton, M. D., Reidsville, N. C.

1. Causes, symptoms and treatment of cerebral embolism and thrombosis.

2. Causes, symptoms and treatment of acute uraemia.

3. Name the conditions both physiologic and pathologic in which we find leucocytosis.

4. In measles, chicken pox, small pox and scarlet fever, give period of incubation; mode of onset; when rash appears; character of rash, character of desquamation, complications and sequelæ.

5. Differential diagnosis between hysteorid convulsions and epilepsy,

6. Differential diagnosis between mitral regurgitation and functional and harmless murmurs.

7. Differential diagnosis between chronic gastritis, gastric ulcer, and gastric carcinoma.

8. Describe the clinical forms of dysentery and differentiate between them and give briefly the essentials of treatment.

9. Tabulate chief causes of ascites, œdema of lungs, cardiac hypertrophy, albuminuria, haemoptysis, jaundice and haematemesis.

10. Name the specific micro-organisms of typhoid fever, malaria, meningitis, croupous pneumonia, diphtheria, gonorrhœa, cholera, yellow fever, influenza, relapsing fever, ulcerative endocardetis, membranous croup,, bronchio-pneumonia and tuberculosis.

Chemistry.—Dr. T. S. McMullan.

1. When are substances "Isomorphus"? What is a colloid substance?

2. What is osmose? What substances are most likely to dialize, and which have no such tendency?

3. What is meant by "chemical affinity"? What physical forces tend to decompose compound substances?

4. What is chemical "analysis," and what is chemical "synthesis"? Mention the elements existing in the gaseous state.

5. What is organic chemistry according to modern views, and mention the four chief elements entering into organic compounds.

6. To what chemical group does glycogen belong? State where it is found, its properties and how acted on by dilute acid.

7. Why are astringent liquids useful in poisoning by vegetable alkaloids? What is antitoxin?

8. What is a proteid? What is a a peptone? State the characteristic chemical difference between the two.

9. State in a general way the chemical difference between animal and plant life.

10. Describe Trommer's test for sugar in urine. What precaution must be observed, and state the chemical reaction if sugar be present.

(Any list for sugar may be substituted for one asked.)

The following candidates passed a satisfactory examination on the foregoing questions, and were licensed to practice:

Richard H. Johnson, Baltimore, Md.; Herbert H. Waite, Asheville; Fred W. Phifer, Statesville; Samuel M. Withers, Davidson; John Walter Jones, Boone; Charles Lee Duncan, Beaufort; J. P. Matheson, Taylorsville; Robert Harllee Bellamy, Wilmington; Jacob H. Shuford, Hickory; Edith E. Blackwell, Greensboro; Katharine P. Hayden, Raleigh; Lloyd P. Russell, Fletcher; William H. Boon, Elon College; Jas. Crampton, Hendersonville; Joseph Graham, Hillsboro; E. A. Hennessee, Glen Alpine; William K. Lane, Goldsboro; McLain Rogers, Clyde; R. F. Hicks, Faison; E. McD. Yount, Conover; J. Rufus McCrackin, Clyde; L. C. Covington, Vanceboro; A. B. McQueen, Raeford; Ira Hardy, Washington; J. N. Taylor, Pittsboro; W. W. Washam, Davidson; L. R. Kirkpatrick, Blackstock; P. M. King, Concord; L. C. Skinner, Davidson; J. W. McLean, Cameron; J. E. Cothell, Tyro Shops; P. H. Williams, colored, West Raleigh; J. W. Walker, colored, Asheville; C. S. Brown, colored, Winston; W. B. Sharp, colored, Harrellsville; A. W. Watkins, Reidsville; L. McIver, Sanford; J. R. Paddison, Mt. Airy; George P. Edwards, Hillsboro; George E. Morton, Granville; P. F. Barnes, Elm City; J. L. Weetz, London; C. E. Reitzell, Liberty; A. R. Gerard, Flat Rock; H. Byrne Maxwell, Whiteville; F. R. Cook, Louisburg; J. A. Sisk, Harmony; J. W. Williams, Warsaw; C. D. Wiseman, Henrietta; E. S. English, Brevard; E. A. Hauser, Falston; L. B. Harrill, Caroline; McGhee Anders, Conelly Springs; George Oates, Grover; Charles E. Reed, Hot Springs; George Huntington, Asheville; W. T. Exum, Jr., Saulston; H. S. Monroe, Lenoir; George Kirby Collier, Wilmington; George H. Castner, Lincolnton; John Lewis Hanes, Winston; S. C. Keerans, Charlotte; H. D. Walker, Creswell;

Pride J. Thomas, Wilmington; E. W. Phifer, Morganton; J. McK. Hunter, Cherryville; J. L. Ballou; Crumpler; William H. Grant, Pine Bluff; J. Warren Bailey, Mineral Springs; H. W. Williams, Mills; C. P. Rogers, Raleigh; E. M. Gale, Warrenton.

Echoes.

Hot Springs in 1903.

Dr. Bob Young, the retiring president, made an efficient presiding officer, handling the business with ease and despatch.

The "old board" of examiners (a fine set of men, by the way,) presented their efficient secretary, Dr. J. Howell Way, with an elegant cut glass punch bowl and heavy silver ladle, as a token of their appreciation of his services as secretary of that body.

While on the subject we can't resist the temptation to say that Dr. Way, although he hails from 'way back yonder in Waynesville, made a most capable secretary of the board of examiners, and we congratulate the society on his election to the office of secretary.

The profession in Wilmington gave the visiting doctors a steamboat excursion down the river, after the meeting adjourned. The occasion was one of keen enjoyment and will be remembered with thanks.

On the whole, the meeting at Wrightsville was one of the best the society has had and we hope "the brethren" will strive to make the Hot Springs meeting of '03 equally profitable from a scientific point, and we are sure the whole profession at Hot Springs will welcome us with open arms.

The doctors who attended the meeting of the State Society were simply charmed with the beach and Seashore Hotel. Some say they would like to meet there each year.

The candidates for license to practice made a good showing. As a whole they were a fine body and "better up" than heretofore."

The Obstetric Fee.

The time-honored custom of accepting a case of confinement for a certain fixed fee is a poor one, and should certinly be replaced by some more equitable system of charging. When the fee is a generous one it is all right, but to attempt to do properly the work involved in caring for a woman before, during, and after confinement for ten dollars—the average fee—is no doubt the cause of many a case of puerperal infection owing to the careless manner in which the work is performed by the physician, who is in a hurry to get back to his office or to make other calls which are more remunerative. A better plan would be to charge for each visit or office call made before the confinement, for each examination of the urine, for the amount of time spent at the time of the confinement, and for each visit made thereafter.—*Med. Age.*

A Rule of Life.

Act uprightly, and despise calumny; dirt may stick to a mud wall, but not to polished marble.—B. Franklin.

Wrap a swollen rheumatic joint in cloths wrung out of ice water, and the pain will almost instantly cease—*Maryland Med. Journal.*

Medical News and Items.

The plague has also broken out at Canton, China.

Zanzibar, Africa, is infected by bubonic plague.

Dr. L. McLane Tiffany has resigned the chair of surgery in the University of Maryland, and has been elected emeritus professor of the same branch.

Several U. S. soldiers have recently died of cholera in Manila, and General Chaffee has issued stringent orders to prevent the spread of the disease.

Dr. A. Jacobi, after nearly a third of a century spent in teaching, retires from the chair of diseases of children, in the College of Physicians and Surgeons.

The North Carolina representatives to the House of Delegates of the American Medical Association are James A. Burroughs, Asheville, and H. A. Royster, Raleigh.

Cuba is now free—free as to governmental matters and free of yellow fever. We shall see how long she will remain free of her old enemy and scourge—yellow fever.

Colonel William H. Forwood, assistant surgeon-general, United States Army, has succeeded Dr. George M. Sternberg, as surgeon-general, Dr. Sternberg having retired, June 8th, with the rank of brigadier-general, after forty-one years of service in the army.

A board of officers will meet at the Marine Hospital Bureau, Washington, D. C., June 16, to examine candidates for admission to the grade of assistant-surgeon in the U. S. Marine Hospital Service. Candidates must be between 21 and 30 years of age, graduates of a reputable medical college, and must furnish testimonials from responsible persons as to character.

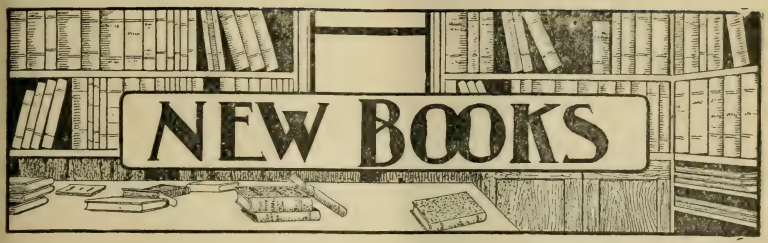
American Medical Association.—The American Medical Association will meet in New Orleans on the second Tuesday in May, 1903. The following officers were elected at the Saratoga Springs meeting: President, Frank Billings, Chicago; first vice-president, J. A. Witherspoon, Tennessee; Second vice-president, G. F. Constock, Saratoga Springs; third vice-president, C. R. Holmes, Cleveland; fourth vice-president, Jas. H. Dunn, St. Paul; treasurer, H. D. Newman, Chicago; secretary, George Simmons, Chicago. Christopher Tompkins, of Virginia, was elected a member of the judicial counsel.

Death of Kussmaul.—Germany celebrated, on February 20th, the eightieth birthday of Adolf Kussmual, and now the cable brings us news of his death. He was professor at Heidel-

berg, Freiburg and Strassburg in turn, and after the age limit had been extended in order to keep him, finally retired to Heidelburg. His widest fame rests on his research on the stomach functions and his introduction of the stomach pump as a means of treating dilatation of this organ. The stomach pump opened a new era for the study not only of the pathology but of the physiology of the stomach. One of his most important contributions to science is his famous article, "die peristaltische Unruhe des Magens, das Platschgerausch und Galle im Magen." He published not long ago a fascinating book of reminiscences, "Memories of the Youth of an Old Doctor." His only son died before him.—*Journal Am. Med. Association.*

Insomnia.

Skelton groups the causes of insomnia into the following: 1. The interference with the normal withdrawal of stimuli. Irritation of the sensory nerves. 2. Irritation of the visceral organs. 3. Over-activity, irritable exhaustion of the cerebral neurons. Intoxications of cerebral neurons. 5. Hereditary unbalanced and irritable neurons. The employment of narcotics is the most irrational treatment, as in most cases of insomnia a toxemia is present and the toxic factor is often so prominent as to force itself on the attention. It is not necessary that afferent sensations should be consciously appreciable to produce insomnia. The treatment consists in the management of the clinical condition, and he outlines in a general way his experience as follows: 1. The induction of muscle fatigue by walks in the open air or by massage. Many people can not sleep because their muscles are not tired and their nervous system is over-excited. 2. The clearing away of intestinal and hepatic accumulations by sulphate and salicylate of soda, combined or not with citrate of potash and lithia. This diminishes auto-intoxication and irritation from distended viscera and aids the circulatory equilibrium. 3. The giving of a proper amount of easily-digested food. 4. The use of a hot bath. 5. Proper sleeping rooms, where seclusion can be had; the victim of insomnia should sleep alone. As regards the action of hydrocarbons, hypnotics and narcotics, we should remember that they interfere with normal metabolism and are purely symptomatic in their usefulness, and have objectionable secondary and side effects, and are used only because of ignorance of the underlying cause of the symptoms, of our inability to control these causes. In a general way we may formulate the indications for their use as follows: Insomnia from pain: Morphin, coal-tar products and large doses of chloral. Insomnia from delirium and reflex irritability: Chloral, trional, sulphonal. Insomnia from delirium and chronic insanity: Hyoscyamin, combined with morphin. Insomnia from "nervousness," "worry": Bromids, given in sufficient doses—twenty grains three or four times in the daytime—is incomparably the best and safest hypnotic. It is to be recollected that morphin increases reflex irritability. The chlorals depress the medulla and are dangerous in heart and vascular diseases, lung, kidney and stomach irritability. Sulphonal and trional cause nephritis.



PROGRESSIVE MEDICINE, Vol. I., 1902. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. . Octavo, handsomely bound in cloth, 452 pages, 5 illustrations. Per volume, $2.50, by express prepaid to any address. Per annum, in four cloth-bound volumes, $10.00. Lea Brothers & Co., Philadelphia and New York.

In Volume I. for 1902, the surgery of the head, neck and chest is considered by C. H. Frazier. The account of recent wonderful progress in the surgery of the Gasserian gangloin, and of the heart, will at once attract the attention of all thoughtful medical men. There is no physician who can afford to overlook the immense value of the knowledge that a wound of the heart may be operated upon with as little hesitation as a wound of the brain, and that in pericarditis with effusion, tapping the heart is entirely practicable.

The section on infectious diseases by F. A. Packard deals with typhoid fever, tuberculosis, and the various eruptive diseases, the constant progress in the study of which is revolutionizing all our previous ideas regarding their diagnosis and treatment.

Floyd M. Crandall writes of the diseases of children; the importance of pediatrics to the general practitioner is daily emphasized and a knowledge of the recent advances in the science of infant feeding has been rendered absolutely necessary.

The section on pathology by Ludvig Hektoen is a summary of the work being done in a science which underlies every department of medicine, and yet with which it is impossible for the clinician to familiarize himself unless studied through some such medium as the present.

Laryngology and Rhinology are written of by St. Clair Thompson, their relation to general diseases coming in for special consideration.

R. L. Randolph's section on otology concludes the volume, discussing various problems of otology, which bring it into relation with the general practice of medicine.

The very complete index which accompanies the book renders it easy

to consult. These quarterly volumes may be regarded as progressive text-books of medicine, containing as they do contributions which cover every field of medicine and surgery, and written by men who know exactly what is of the greatest value to the practitioners for whom they write.

ATLAS AND EPITOME OF SPECIAL PATHOLOGICAL HISTOLOGY. By Docent Dr. Hermann Durck, Assistant in the Pathological Institute in Munich, etc. Authorized Translation from the German. Edited by Ludvig Hektoen, M. D., Professor of Pathology in Rush Medical College, Chicago. With 123 colored illustrations on 60 lithographic plates. Philadelphia and London: W. B. Saunders & Company, 1901. Pp. 5 to 192. Price, $3.00.

One of the marked features of this work is the liberal number of handsome and accurately-drawn illustrations. In nearly every instance the structural details are so well brought out that the practised eye has little or no difficulty in making a diagnosis at a glance from the drawing alone. Until a better method of the reproduction of photomicrographs is found, it seems that drawings, such as these, even though they are somewhat diagramatic at times, are as satisfactory and instructive as possible. The drawings have been reproduced with an accuracy and faithfulness that, it is quite safe to say, have not previously been approached.

The present volume completes the theme of special pathological histology, but one volume dealing with general pathological histology is in course of preparation. The text has been carefully translated from the German by Dr. Hektoen, who has added many notes of much value and liberal references to recent monographs. This volume includes a consideration of the lesions of the liver, urinary organs, sexual organs, nervous system, skin, muscles and bones. Diseases of the pancreas have hardly received the amount of consideration warranted by the importance of the subject. The work is a good one, free from defects, and one which we feel sure will receive recognition by all interested in pathological histology.

ANDER'S PRACTICE OF MEDICINE.—A Text-Book of the Practice of Medicine. By James M. Anders, M. D., Ph. D., LL. D., Professor of the Practice of Medicine and of Clinical Medicine, Medico-Chirurgical Colloge, Philadelphia. Fifth Edition, thoroughly revised. One handsome octavo volume of 1,297 pages, fully illustrated. Philadelphia and London: W. B. Saunders & Company., 1901. Cloth, $5.50 net.

The success of this work as a text-book and as a practical guide for physicians has been truly phenomenal. Five large editions have been called for in less than four years. The rapid exhaustion of each edition has made it possible to keep the book absolutely abreast of the times, so that Dr. Anders' book has become justly celebrated as a thoroughly up-to-date work on the practice of medicine.

In this edition the most thorough and extensive changes have been made in connection with the large

group of Infectious Diseases. No pains have been spared to present modern views, derived from clinical experience and critical bedside observations, as well as newly discovered scientific facts. Especial care has been bestowed upon the etiology, including bacteriology, inductive diagnosis, and the details of treatment, in the belief that these phases of the subjects treated from the ground work for an intelligent and successful pursuit of the science and are of medicine.

The etiology and mode of transmission of malaria and of yellow fever have been almost entirely rewritten. Certain affections of growing importance, as diphtheretic dysentery and parasitic hemoptysis, have been recast and more fully discussed. A few new articles have been introduced; for example, Fatty Infiltration of the Heart, Streptococcus Pneumonia, and Acute Diffuse Interstinal Nephritis. Among leading infections that have received careful and thorough revision are typhoid fever, malaria, cerebro-spinal meningitis, lobar pneumonia, influenza, variola, chronic tuberculosis and hydrophobia. The entire work, moreover, has been carefully scrutinized and brought into harmony with the most recent developments in practical medicine.

Vecki's Sexual Impotence.—The Pathology and Treatment of Sexual Impotence. By Victor G. Vecki, M. D. Third Edition, revised and enlarged. 12mo, 329 pages. Philadelphia and London: W. B. Saunders & Company, 1901. Cloth, $2.00 net.

The reading part of the medical profession of America and England has passed judgment on this monograph. The whole subject of sexual impotence and its treatment is discussed by the author in an exhaustive and thoroughly scientific manner. The former edition was exhausted in less than two years. In this edition the book has been thoroughly revised, and new matter has been added, especially to the portion dealing with treatment.

Although no one denies that the sexual function is of the very greatest consequence to the individual as well as to society in general, yet the subject of impotence has but seldom been treated in this country in the truly scientific spirit that its preeminent importance deserves, and this volume will come to many as a revelation of the possibilities of therapeutics in this important field. The author ventures to assert that in many cases it is a better deed to restore to an impotent man the power so precious to every individual, than to preserve a dangerously sick person from death, for in many cases death is preferable to impotence.

It is a well-written, scientific work, and can be recommended as a scholarly treatise on its subject.

An Out-of-Doors Number.—The issue of The Outlook for June 7th, is the Thirteenth Annual Recreation Number. The leading features are "Hunting Big Game with the Camera," by A. G. Wallihan; "When You Meet a Bear," by W. J. Long; "Mountain Climbing," by Charles E. Fay; "Camping for Women," by Martha Coman; "Lost in the Woods," by George Kennan; "Behind the Guns," by Jas. Barnes;

"The Salmon Leap," (a beautiful picture illustrating a passage from Izaak Walton); and "Winning a Y," by Walter Camp. There are also Dr. Hale's "Memoirs," an illustrated article on Jane Austin's Home, a good story, and interesting, timely portraits. The number is richly illustrated with drawings by Charles S. Chapman, Philip R. Goodwin, Henry Sandham, J. Conacher, and F. C. Gordon; and photographs by A. G. Wallahan, J. Horace McFarland, and others.

THE DIAGNOSIS OF SURGICAL DISEASES.—By. Dr. E. Albert, State Director and Professor of the First Surgical Clinic at the University of Vienna. Authorized Translation from the Eighth Enlarged and Revised Edition, by Robert T. Frank, A. M., M. D., with fifty-three illustrations. D. Appleton & Co., New York; 1902.

The American translator very aptly calls attention in his preface to the variety of works upon surgical diagnosis as compared to the numerous volumes which have been published upon the medical diagnosis. On general considerations then, it would seem that such a work must meet with favor. An examination of Dr. Albert's surgical diagnosis, however, indicates that it does not depend upon such a precarious popularity. In order to present the problems of diagnosis as they appear at the bedside, the author has discarded theoretical classifications, and instead groups diseases in accordance with their similarity of symptoms and general resemblance, thus presenting the difficulties of diagnosis as they are in actual practice. In this way the advantages of clinical teachings are most nearly attained. This work will be found of value to all classes of practitioners, and contains many points of diagnostic interest that would require long search to find in ordinary surgical publications. The mechanical features of the book are fully up to the standard of this well and favorably known publishing house.

INTERNATIONAL CLINICS, A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pædiatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat, and Other Topics of Interest to Students and Practitioners, by leading members of the medical profession throughout the world. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S. A., with the collaboration of Jno. B. Murphy, M. D., of Chicago; Alexander D. Blackader, M. D., of Montreal; H. C. Wood, M. D., of Philadelphia; T. M. Rotch, M. D., of Boston; E. Landolt, M. D., of Paris; Thomas G. Morton, M. D., Chas. H. Reed, M. D., of Philadelphia; J. W. Ballantyne, M. D., of Edinburgh, and John Harold, M. D., of London, with regular correspondents in Montreal, London, Paris, Leipsic and Vienna. Volume IV. Eleventh Series, 1902. Philadelphia: J. B. Lippincott Company.

Voluve IV. of the International Clinics has a long list of distinguished contributors and will be found fully equal to any foregoing issue. The section of Therapeutics contains

articles by A. Jacobi, H. C. Wood, Jr., Charles H. Burnett, Albert Mathien and others of like authority. Under the head of General Medicine appear valuable papers by Sir Dyce Duckworth, J. Mitchell Bruce, James J. Walsh and a highly suggestive article by James H. Walker, "A Foreign Body in the Air Passages Simulating Rapid Phthisis." The section on Surgery has a chapter by Dr. Nicholas Senn upon quite a variety of subjects of practical interest. G. Frank Lydston writes of movable kidney, and there is also an article by Dr. J. B. Deaver.

A notable feature of this volume is a special article on "Methods of Keeping Case Records in Private Practice," by Fred A. Packard, J. P. Crozer Griffith, Judson Daland, J. K. Mitchell, J. H. Musser and Alfred Stengel. The above very brief abstract of subjects and authors will be sufficient to demonstrate the truth of the opening remark, that Volume IV. is fully up to the standard of its predecessors.

DaCosta's Surgery. 3d Edition. Revised and Greatly Enlarged. Modern Surgery, General and Operative. By John Chalmers DaCosta, M. D., Professor of Practice of Surgery and Clinical Surgery, Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital, etc. Handsome octavo volume of 911 pages, profusely illustrated. Cloth, $4.00 net; half morocco, $5.00 net. W. B. Saunders & Co., Publishers.

The success of the first and second editions of DaCosta's Surgery is a flattering testimonial, of the most practical kind, of the appreciation of the medical profession. This work has been pronounced by competent and unprejudiced authorities to fulfill the objects for which it was written, better than any similar work of the kind published in the English language. It is needless to say that, in this, the 3d edition, the distinguished writer has allowed no opportunity to pass of perfecting a publication that has received such marked attention at home and abroad. This edition merits all and more than we have said of its predecessor.

American Text-Book of Physiology. Edited by William H. Howell, Ph. D., M. D., Professor of Physiology in Johns Hopkins University. Vol. II., royal octavo, of nearly 600 pages, fully illustrated. Cloth, $3.00 net; sheep or half morocco, $3.75 net. Philadelphia and London: W. B. Saunders & Co., 1900.

Even in the short time that has elapsed since the first edition of this work there has been much progress in physiology, and in this latest edition the book has been thoroughly revised to keep pace with this progress. The result is that the American Text-Book now represents the most modern work on Physiology. Statements and theories that have been shown to be wrong or improbable have been eliminated, and the new facts discovered and the newer points of view have been incorporated.

The chapter upon the Central Nervous System has been entirely rewritten in the light of the latest knowledge, with the intention of

rendering this important branch of the subject suitable to the needs of students and practitioners. A section on Physical Chemistry forms a valuable addition, since these views are taking a large part in current discussion in physiological and medical literature.

The first edition of this work was pronounced to be the best exposition of the present status of the science of Physiology in the English language, and in its revised form the book will doubtless remain the leading work on Physiology for students and practitioners. The subjects comprised in this volume are: Muscle and Nerves; Central Nervous System; Special Senses; Special Muscular Mechanisms, and Reproduction.

THE PERVERTS.—By William Lee Howard, M. D., 12 mo., cloth bound, $1.50. G. W. Dillingham Company, New York.

It is safe to say that the physician, or scientifically inclined layman, having begun this book, will give it his attention to the end, however, some of the views advanced upon morals and religion may conflict with his preconceived views. It is the history of a family of degenerates, a striking analysis of those unfortunates whose morbid mentality furnish the world with those contradictory characters, a man of genius at one time and a cunning criminal, or a disgusting drunkard at another. The style is vigorous and aggressive, the knowledge of life, particularly of that substrata in our great cities towards which individuals of this character gravitate, is unusual. It will be found of fascinating interest, especially to physicians. The author has spent much time in the study of these human wrecks and presents his conclusions in a most plausible way. Through the whole book is interwoven a very pretty love story, while one's attention is held spellbound by the cunning and diabolical schemes of Mizpra.

A TREATISE ON SMALLPOX, to sell at $3.00, is announced for publication early in April by J. B. Lippincott Company, Philadelphia. It is written by Dr. George Henry Fox, Professor of Dermatology in the College of Physicians and Surgeons, New York City, with the collaboration of Drs. S. Dana Hubbard, Sigmund Pollitzer, and John H. Huddleston, all of whom are officials of the Health Department of New York City. The work is to be in atlas form, similar to Fox's Photographic Atlas of Skin Diseases, published by the same house. Its illustrations, reproduced from recent photographs, will be so colored as to give a very faithful representation of typical cases of variola in the successive stages of the disease, also unusual phases of variola, vaccinia, varicella, and diseases with which smallpox is liable to be confounded.

The Sinecure.

"Well, my boy, and what are you going to do now?"

"Well, dad, I don't know. What I want is one of those fancy jobs where you do the least possible work for the very largest possible fee."

"Guess you are cut out for a corporation lawyer, my boy."

"No, dad; I was thinking of being a medical specialist."—*The Doctor.*

Many Notable Cases

Have been cited by eminent Medical authorities,
affirming the goodness of

TONO NERVINE TABLETS

A scientific exhibit of a combination of well known drugs of

RECIPE

Ext. Sumbul	1-2 gr.
Phosphorus	1-100 gr.
Ferri Carb.	1 gr.
Ext. Nuc. Vom.	1-10 gr.
Ext. Damiana	1 gr.
Asafetida	1-2 gr.

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the highest possible quality and at once recognizable by the therapeutist

As a Most Valuable Nerve Tonic

As a protection to the Doctor these tablets are issued in bottles of 100 only, and we advise prescriptions calling for original packages.

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A Sovereign Remedy in all Stomach Troubles

Valuable as an adjunct to Calomel administration

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BALTIMORE SAN FRANCISCO LONDON, ENG.

Hyperemia of the Conjunctiva.

Drs. Wood and Woodruff, in *Medical Standard,* recommend the following treatment of hyperemia of the conjunctiva: Remove the cause if possible, and apply cold locally to the closed eyelids three or four times a day. In a few cases hot water is more effective than cold water. Following the the application of cold or hot water, several drops of a soothing, non-irritating solution should be instilled into the conjunctival sac as follows:

℞ Acidi borici ..... ʒss 2
Sodii biboratis..... ʒss. 2
Aquæ rosæ ..... ʒii. 8
Aq. destil. q. s. ad..... ʒii. 60

M. Sig.: Instill locally into the eye.

If the lids are gummy or show a tendency to adhere in the morning a little simple ointment should be gently rubbed on the eyelashes at night. Sometimes a more stimulating lotion is desired, as follows:

℞ Zinci sulph.....gr. i-ii. | 06–12
Aq. destil. ..... ʒi. 30

M. Sig.: Apply locally once or twice daily.

In the same journal they advise the following in the treatment of opthalmia neonatorum:

℞ Hydrastin sulph.....gr. v. | 30
Acidi boracici.....gr. v. | 30
Sodii biboratis.....gr. v. | 30
Tinct. opii..... ʒss 2
Aq. destil. ..... ʒi. 30

M. Sig.: To be instilled into the eye every hour.

Other solutions may be used as follows:

℞ Potassii permanganatis gr. i. | 06
Aquæ destil. ..... ʒviii. 240

M. Sig.: To be dropped into the eye once or twice a day; or:

℞ Hydrarg. bichloride ...gr. ss. | 03
Aquæ destil . ..... ʒviii. 240

M. Sig.: Drop into the eye daily.

According to them, chlorin water is very efficient when much pus is secreted:

℞ Aquæ chlori ..... ʒvi 25
Aq. destil. ..... O. i. 480

M. Sig.: Apply locally.

—*Journal A. M. A.*

Pediatric Suggestions.

1. Give a baby plenty of water four or five times a day; 2. Give a baby a rockless bed to itself; 3. A baby should be held only to be nursed; 4. Massage and exercise a baby each day; 5. Give a baby a chance to lay naked and kick daily; 6. Never give a baby diluted alcohol, liquors or coffee; it will acquire perverted appetites soon enough; 7. Teach a baby to hang by its hands and spring with its legs; 8. Don't advise a parent to give the baby a little soothing syrup, paragoric, or castor oil; in short, do no offhand prescribing at all; 9. If the mother is weak or anaemic, correct any lesion, and give her calcium hypophosphite 5 to 20 gr. per day; thus, via milk, nourish baby; 10. If the baby is constipated, give the mother sodium phosphate; 11. Ventilate sufficiently, and keep room temperature below 75 degrees F.; 12. A cartload of sand makes a healthful plaything for a baby.—*—Texas Medical News,* January, 1902.

Gastric Ulcer.

℞ Picrotoxin. .....
Morph. hydrochl .....aa gr. i.
Atrop sulphat ..... gr. ½.
Ergotin ..... m. xx.
Aq. Laurocerosi..... ʒiij.

M. S.: Four to six drops five to ten minutes before each meal.

Do We Really Need It?

Beef, Iron, Cinchona and Brandy go to make it. Any one of these given alone would do good. Consider, then, how much the benefit could be increased by combination!

"The stimulant action of Extractum Carnis has been considered almost equal to that of alcohol, and bulk for bulk, it is certainly much greater. Two-fifths of an ounce of the Extract represents one pound of mutton." W. GILMAN THOMPSON.

"Iron is a food—not a medicine. Of the value of iron in anæmia and chlorosis, there can be no doubt." H. C. WOOD.

"Cinchona is extremely serviceable in atonic dyspepsia, gastric catarrh, adynamia, convalescence, asthma and chronic bronchitis." SAMUEL O. L. POTTER.

"Alcohol is the savings bank of the system. He who eats little and drinks alcohol in moderation retains as much nutrition in his blood and tissues as he who eats more and drinks less." MOLESCHOTT.

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Gastralgia—Its Treatment.

Gastralgia is, for therapeutical purposes, divided into two separate groups by Professor Saundby (*N. Y. Medical Journal*). The first group comprises those cases in which pain occurs independently of eating, and the second group, those cases in which the pain occurs after food is taken. The treatment of the first class consists of change of scene, a sea voyage or mountain air and abundant food at regular intervals. The palliative treatment consists of iron, quinine, arsenic, nux vomica and the mineral acids.

For the second class, the treatment is, rest in bed, milk and lime water in sufficient quantities—say an ounce every hour.

A nutrient enema of one egg, beaten up in four ounces of milk, to be given every four hours. The amount of milk should be increased with improvement, and if milk fails, from two to four ounces of lightly cooked mince meat may be substituted.

For the relief of the pain in both cases, Saundby gives morphia or heroin, but in a recent clinical report Profesor Boone, College of Physicians and Surgeons, St. Louis, states that he finds one Antikamnia and Heroin Tablet (5 grain Antikamnia; 1-12th grain Heroin Hydrochloride) given as required, not only relieves the pain, but prevents its recurrence, much more satisfactorily than either heroin or mirphine alone. In other respects he concurs with Professor Saundby in his method of treatment.

An Up-Builder in Post-Grippal Cases

Very many of our readers know by reputation, at least, Dr. A. H. Ohmann-Dumesnil, one of the foremost physicians of St. Louis. From a letter of recent date we are permitted to quote the following, which we do with pleasure: "I needed a robortant, and took, with much benefit to myself, Hegee's Cordial of Cod Liver Oil Compound. Since then I have had occasion to use it in a number of cases of grippe, and in all of them the results were of the best. The action of this preparation is rapid and thorough; and in a remarkably short time a case is recovered. It is certainly the remedy par excellence for this now prevalent affection.

In a number of post-grippal cases in which enteric neuralgia, bronchial involvement, and a number of nervous symptoms manifested themselves, I have found this preparation equally effective. It is an excellent upbuilder, and rapidly restores to its former condition the weight which has been diminished by the waste of tissues consequent to grippe."

This is certainly very high praise from an eminent authority.—*Mass. Medical Journal.*

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Notice of Change in Address.

The G. R. X.-Ray Manufacturing Company., a firm recently made pleasant acquaintance with many of our readers, has for three years had its main factory in Ravenna, Ohio, and very little has been done in Grand Rapids, Mich., outside of the office work. Last year an addition was built to the Ravenna factory, to make space not only for the manufacture of more of their static x-ray apparatus, now so well known as the "Sorensen," but also to make room for offices.

Before the building was completed, the demand for their different x-ray apparatus was so great, however, that they had to use every foot of space for manufacturing purposes, and it was not until another addition was built this spring, and space rented in other buildings besides, that they had got room enough to move everything to Ravenna, but even with the additional space, the demand for their goods has so increased, that they must build again this summer.

The constant demand for "The Sorensen" shows how much this machine is used by the medical profession.

The X-Ray Manufacturing Co. in Ravenna, Ohio, is the only factory making static machines all from the crude material into a complete finished machine. The lumber is bought in the woods, and dried and prepared in the factory, and same way with all the other material.

Our readers, who have formerly had dealings with them, as well as new customers, will after this address all communications to G. R. X-Ray Manufacturing Co., Ravenna, O.

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Indeed none the less is our gratitude to the Carolina Medical Journal, which has been so frequently mentioned in the communications requesting samples, etc., therein showing the large and wide-spread circulation of so consummate and estimable a journal.

Very sincerely,
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The growth of the Agricultural and Mechanical College at Raleigh during the past year has been remarkable; 369 students have been enrolled, representing 6 States and 82 counties. The oldest was 69 years of age, the youngest 15, average 20.

Nearly $4,000 was earned by students during the year; the largest amount was $161.95, smallest 15c., average $16.95. Work done was on farms, dairy, dining-room, greenhouses, dormitories, and lawn. Many students sell shoes, stationery and clothing; some mend shoes, some are barbers. Work is the rule of the college. Every student must learn to work; must spend at least two hours a day in the carpenter shop, blacksmith shop, lathe shop, machine shop, drawing room, dairy, green house, electric laboratory, or textile building. Nobody is paid for regular work, the pay is for work done outside of study hours.

Besides book studies and practical work in shops, laboratories, etc., the students have many useful societies and clubs, which meet about once a week. Some are the Y. M. C. A., with 50 members, Rural Science Club, with 40, Electrical Society, with 25, Dramatic Club, with 14,

and the Leazar and Pullen Literary Societies with 250.

The college is now erecting two large new buildings, and by next September will be ready to accommodate 500 students.

A Word of Praise.

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DR. KNITEL.

Ebelsburg, Austria, Aug. 8, 1901.

I am not in the habit of writing promiscuously of the virtues of medicines, but when I have used a remedy for many years with uniform success, I feel that it is not out of place to give that remedy my commendation. I have been engaged in the practice of medicine here for many years, and the diseases which I am called upon to treat are mostly of malarial origin. Under such circumstances I am required to have a positive and efficient tonic for the hepatic organs. It is very difficult for me to get along without that tried and true remedy for the above condition, Chionia. I have fre-

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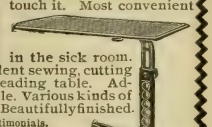

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Alexander Bryce, M. D., D. P. H.
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A unique and quite surprising operation has taken place in Greater New York, where a living frog was removed from the stomach of a woman, says the *New York Medical Journal.* The frog was probably swallowed when it was in egg form or in its infant state, a tadpole. It is believed that it lived in the patient's stomach for five years. The frog lived for several hours after the operation, and is preserved in alcohol in the laboratory of St. Catherine's Hospital, in Brooklyn. Mrs. Chas. Burtis, the patient, will take it home with her to Hopewell Junction, N. Y., when she is discharged from the hospital.

Keen (*American Journal of Medical Sciences,* July, 1901,) in an article describing several operations for traumatic epilepsy in which he injured the lateral sinus, comments on the apparent harmlessness of the accident. No untoward results were noticed in any of the cases in which it occured. He operated on one case in which a piece of bone embedded in the cerebral substance had escaped detection.

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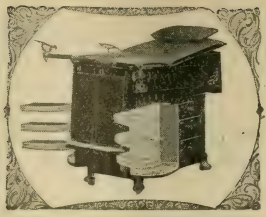
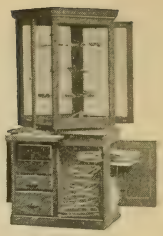

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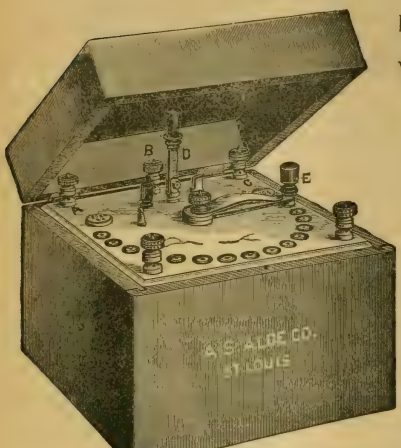

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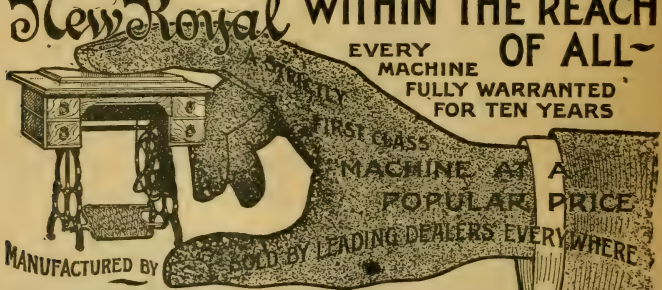

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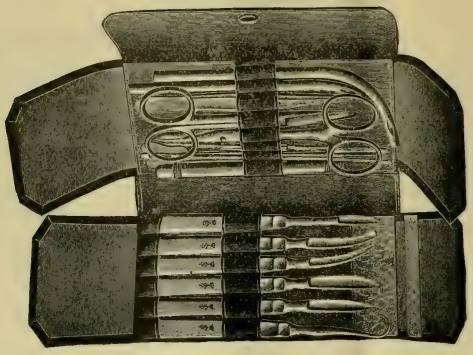

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A Monthly Journal of Medicine and Surgery.

VOL. XLVIII. CHARLOTTE, N. C., JULY, 1902. No. 7

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EDITORIAL.

BRIGHT'S DISEASE.

In the recent discussion of chronic nephritis, at the Saratoga meeting of the American Medical Association, some interesting views bearing on etiology, symptomatology and diagnosis were expressed.

Dr. Louis Bishop, of New York, regards chronic Bright's disease as a good clinical term for a diseased condition involving many organs. Bright's disease is no longer regarded as a disease essentially pertaining to the kidneys.

Dr. Arthur Elliott, of Chicago, believes chronic nephritis a slow inflammatory process arising from a pathological condition of the blood, leading to destruction of the parenchyma, with eventual shrinking of the organs. The important phenomenon is the blood dyscrasia and its casual bearing upon the terminal renal atrophy. The cleansing of the blood is done largely by the kidneys; the elimination of these toxic or metabolic, abnormal products from the blood causes irritation and eventuates in disease. These toxic or metabolic agents are not the same in all cases. They may arise in various conditions, as in scarlatina, pregnancy or from nutritional disturbances accompanying gout, chlorosis, diabetes, syphilis, the various cachexiæ, overwork, skin disease, hepatic and intestinal affections.

Autotoxæmia of digestive origin is one of the most frequent causes of nephritis, and the full extent of its relationship has never been fully stated. The success of dietetic treatment in nephritis, the effect of irrigation of the

colon on renal elimination, the aggravation of renal symptoms by gastro-intestinal disturbances, all show the importance of a clean digestive canal. Toxæmia and its etiological bearing on nephritis should always be kept in mind.

Dr. A. O. J. Kelly thinks great circumspection should be exercised in diagnosing so-called functional albuminuria; that in this condition the albumen should never exceed 0.1 per cent.; urine should contain no other abnormal ingredient; every bodily organ should be examined and found to be in health; a long series of examinations of 24 hours urine should be made. The cordiovascular changes in chronic nephritis are of extreme importance; they dominate the clinical picture of the disease, its diagnosis and treatment. These lesions involve the heart, large and small arteries and capillaries. Hypertrophy of left ventricle is found in all forms of nephritis, but some individual cases do not show it. Loss of elasticity and more or less arteriosclerosis and atheroma are changes found in large vessels in many cases; neither exists in every case. The smaller vessels show muscular and fibroid thickening of their walls. Increased arterial tension arises from obstruction to flow of blood through the arteries and capillaries, and is due to some irritative metabolic product which should be thrown off by the kidneys. These cardiovascular changes are very constant in chronic interstitial nephritis; then if we find increased arterial tension, accentuated aortic second sound and physical signs of left ventricular hypertrophy, even with urinary symptoms not marked, they point almost unerringly to the interstitial type of nephritis.

The nature and mode of action of the morbific agents in production of nephritis presents a wide but difficult field for investigation.

THE HOUSE OF DELEGATES.

The first meeting of the House of Delegates of the American Medical Association has been most favorably noticed in the medical press of the country. It of course could not be expected that a departure of this kind would at once realize to the fullest, the objects which its advocates desired, but the failures relate to mere matters of detail, that can be speedily rectified with a little more experience, while there can be no doubt the change will prove a success in every way.

This is only another move in the way of nationalizing our scattered and divided profession, and will have a very decisive effect in that direction. The same tendency is shown in a motion by Dr. Rodman proposing a national board of medical examiners. In spite of some opposition which developed, it is said that the motion could have been carried through the House of Delegates at Saratoga, but very wisely it was decided to act slowly in so important a matter, and the vote was postponed until another meeting. It begins to look as if this or some similar solution of the present awkward system will ultimately prevail. Thus is seen in our profession, as well as in other and widely different spheres of human work, that modern tendency towards combination and centralization. If this has its evils and its dangers, it must also be admitted that it has its advantages.

The constitution and by-laws recommended by the Association have al-

ready been adopted by five State societies.

The present favorable condition of the King of England is a matter for congratulation, and to none more than to his medical attendants. It is very easy to criticse, and the lot of physicians and surgeons, especially the latter, when placed in charge of a patient of national importance, is not an easy one. There seems a general impression, although it is difficult to believe that it can be based on anything like exact informaton, that the surgeons of King Edward exposed their royal papatient to increased and unnecessary dangers by the adoption of a too conservative course; in other words, that the King should have had the benefit of an operation some days before he did. Whether that be so or not, it begins to look as if his speedy recovery will entirely offset such criticism, certainly until the real facts are known. In connection with this case it is amusing to read the interviews with "eminent surgeons" and specialists, who anonymously make a diagnosis and give a prognosis in the public prints upon data so insufficient and obviously inaccurate as would not justify them in prescribing for an ordinary diarrhœa. The same thing occurred in the case of President McKinley, and we had the spectacle of a distinguished medical man, who was himself not present at the operation, and who had apparently not even seen the wound, pronouncing the President out of danger; an opinion which was unhappily negatived in a few hours.

Various and innumerable have been the remedies suggested for the unfortunate victim of baldness, but as in other diseases where a great number of remedies are recommended, none are found, on trial, to prove of much benefit. The time-honored practice of shaving the scalp for incipient baldness has received recent endorsement in Germany, and is especially advised by two Turkish physicians in Constantinople, who report excellent results from this method. It certainly seems reasonable that local stimulating applications would have more effect on a shaven scalp, and that the application of the razor would itself favorably affect the growth of the hair. However, we apprehend that this plan of treatment has long ago been tried thoroughly and discarded, with a great number of other much-vaunted remedies. There seems nothing for a man anxious to avoid the loss of his scalp appendage but to carefully watch and wait until his thirtieth year, after which period, the dermatologists tell us, the chances of his becoming completely and disgracefully bald are much reduced.

A Dinner to Dr. Sternberg.

A complimentary dinner was given to ex-Surgeon General George M. Sternberg, of the United States Army, at Delmonico's on the evening of June 13, to give his colleagues in the medical profession an opportunity of expressing their appreciation of the work which the officer has done during his term of service. He was retired on the age limit on June 8. About one hundred physicians and surgeons of the country were present, several of them making addresses. The banquet was presided over by Dr. E. G. Janeway, of this city.

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ORIGINAL COMMUNICATIONS.

The Radical Cure of Hydrocele.

By Hubert A. Royster, A. B., M. D.,
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It would seem unnecessary to discuss so ancient and simple a malady as hydrocele of the tunica vaginalis but for the confusion which still exists concerning its proper mode of treatment. Surgeons are often uncertain as to what advice to give patients who present themselves for relief. When authorities are consulted there is found a jumble of conflicting ideas, and one is constantly hesitating to choose the plan of treatment suitable for each individual case. With this thought in view and this experience as a guide, it is proposed here to examine into the different procedures recommended for the cure of hydrocele and to carefully consider their results.

In order to elucidate the points involved in attaining a radical cure, it is proper to review the pathology of hydrocele. It is a much more common affection than is usually supposed, being more frequent in old and middle-aged than in young men, though it does occur in the latter. It consists in an abnormally large amount of serous fluid in the space between the layers of the tunica vaginalis testis. This fluid is generally clear and of a straw color, but it may be dark and thick or bloody. In all hydroceles the interior lining is glistening in appearance while the sac-wall is more or less thickened. From this serous surface constantly exudes the secretion which fills up the tunic space and constitutes the cystic tumor known as hydrocele. Removal of the fluid simply allows a reaccumulation from the weeping wall, whose secretory power is not disturbed by this process. The only means of effecting a permanent cure is to prevent this ex-

cessive secretion by destroying the function of the cells and obliterate the cavity.

Dismissing simple tapping as intended solely for the few patients who are too old and feeble for the more severe methods or for the others who may be so foolish as to refuse them, there are in vogue two well-recognized plans for the radical cure of hydrocele: First, the injection of certain chemical substances following removal of the fluid, and, second, some form of incision or excision of the sac. The materials usually injected are the tincture of iodine and carbolic acid, each of which by its irritant action sets up an adhesive inflammation. Excision of the sac may be partial or total; antiseptic incision requires subsequent packing. For permanent results one of these methods must be practiced, but to determine which one, in any given case, is often a difficult matter. Opinions differ as to the value of the injection plan and as to the expediency of the excision methods.

A historical review of the literature will show how vacillating have been the ideas on the radical treatment of hydrocele and how widely authorities have varied. The elder Gross, to whom we go as the fountain-head of all surgical knowledge, speaks of incision and excision as being obsolete, the former being the oldest of all and excision being revived in 1755. Gross' preferable operation was by the seton method, but during the last ten years of his life he cured many cases "by laying open the vaginal tunic with a small incision and, after all the fluid had been discharged, mopping the sac freely with equal parts of iodine and alcohol, or iodine variously diluted. In no instance have any unpleasant symptoms followed this procedure." He mentions strong objections to the injection method, viz: occasional failure, escape of the injection fluid into the cellular tissue, severe inflammation and sloughing. He mentions a case in which death from tetanus followed an injection of port wine and water. It is easy enough to understand, in the light of our present knowledge, why Gross had trouble in a closed sac with the injection method, but did not with the seton or open wound where drainage was secured. In Holmes' System of Surgery (1881) it is claimed that iodine has the advantage over other fluids for injection, and that incision into the sac "is an effectual method, though unnecessarily severe for ordinary cases." In the International Encyclopedia of Surgery (1886) H. R. Bell quotes Sir Astley Cooper as saying of incision and excision that "they are too dangerous and too cruel for so trifling an inconvenience," and speaks of the injection method as being known to the ancients. Further, Bell states that "the treatment of hydrocele by antiseptic incision is especially useful when the injection of iodine has failed" or when other complications exist. It is, he says, doubtless a safe and certain method, but it requires an anesthetic and is more likely to go wrong from the patient's indiscretion. "Patients who are too ill or too aged to be subjected to the treatment by injection had better be contented with palliative measures."

Of the more modern writers, we find that Wyeth (1887) recommends but two methods, injection and incision, the former to be preferred in recent cases, with a small sac and without thick walls. If this fails, it should be repeated once or twice before the more formidable procedure is done. Later

(1898) he says that the carbolic injection method should cure about 75 per cent. of all cases at a first injection, and speaks of using in recent years local anesthesia for operating even by the incision method of Volkmann. Moulin (1891) says that failure occurs in at least one-third of cases treated by the iodine injection, and regards partial excision as much more satisfactory. He thinks it a question whether castration is not to be preferred as producing less risk in aged, broken-down patients with thickened sac-walls. Morton's conclusions are quoted in Dennis' System of Surgery (1895), and the substance of these is that injection of iodine and carbolic acid will cure abut 85 per cent.; that the acid is growing in popularity; that antiseptic incision will guarantee a cure with almost absolute certainty, and that the danger is no greater than in the injection method; that the treatment by excision is probably unnecessary and unjustifiable. Tuholske, in the International Text-Book of Surgery, regards Levis' carbolic injection method as the preferable treatment, having seen but one relapse in twenty cases, and reserves incision methods for those cases in which the injection fails or complications exist. DaCosta (Modern Surgery, 1900) believes that injections of irritants should be abandoned on account of inflammation occurring without drainage. He seems to prefer Hearne's plan of incising the sac, drying the interior with gauze, swabbing with pure carbolic acid and packing with iodoform gauze. DaCosta says, moreover, that "it has recently been proposed to tap the sac with a trocar and cannula, to leave the cannula in place as a drain for some days, and to dress antiseptically." Jacobson is well satisfied with the antiseptic incision, and prefers it when the patient can lay up. Bryant uses a modified excision method as the best operative procedure. Fuller considers the carbolic injection the method of choice in the largest number of cases. Zuckerkandl (Atlas of Operative Surgery, 1902) says that the iodine injection with regard to the certainty of the result stands behind radical incision. The incision method of von Bergmann is favored and also the less radical modification of Winklemann, who incises the tunic and closes it to such a degree that the testicle cannot return into its cavity, while the cutaneous wound is closed over the folded serous sac and the testicle.

From this array of opposing evidence we may conclude that the safest plan of undertaking the radical cure of hydrocele is, first, to withdraw the fluid and inject into the sac a small quantity of the tincture of iodine or pure carbolic acid, preference being in favor of the latter. If this method fails, as it will in some cases, excision of the sac will offer the best chances of success. My personal experience leads me to believe that the injection method rarely succeeds the second time, and that after a primary failure nothing is gained by a repetition of the procedure. Some sacs, however, after being injected, fill up with a bloody fluid, which absorbs very slowly and appears to prevent a permanent cure. This fluid may be drawn off with a cannula, without repeating the injection, and thus the desired result may be obtained. Such a state of affairs came about in a case of my own, which, after being managed as described, seems now to be cured. My recent records show 16 cases of hydrocele, one of which was bilateral. Of these 15 were treated by the injection plan, divided as follows: Ten by io-

dine and carbolic acid combined, three by iodine alone and two by the acid alone; the remaining case was subjected to an excision of the sac, with a perfect result, six months after a failure by the iodine injection. None of the cases have so far recurred. It is not permitted me from this limited experience to lay down any positive rules. But I am firmly convinced of the fact that the injection of hydrocele cures a large percentage of cases, and that it should always be done first, reserving the more serious, but hardly more radical, operations for cases which cannot be cured by injection. Carbolic acid is still gaining in favor, and Coley has lately suggested its use in much smaller quantities than usually advised, viz: 5 or 6 drops, an amount which he asserts is sufficient for even large hydroceles, if it is thoroughly distributed over the sac-wall. My combined use of the acid and iodine was thought of as a means for obtaining the good effects of both agents. I think, however, that a few drops of carbolic acid will be the ideal injection fluid.

Retention of Urine.

By A. J. Crowell, M. D., Charlotte, N. C.

Mr. President and Gentlemen:

As chairman of the section of pathology and bacteriology, I should give you a report of recent investigations in these branches, but on account of circumstances over which I had no control, I have been unable to do this. Therefore, rather than fail to prepare a paper at all, I decided to get up a practical one on a trouble with which every general practitioner, as well as the specialist, is constantly confronted—retention of urine.

Retention of urine is the inability to empty the bladder. This is a trouble of frequent occurrence, often overlooked, and far-reaching in its results, as I shall endeaver to show you later, and usually very poorly treated.

The wonderful power the kidneys have to take from the circulation, and eliminate from the body toxic substances, which if allowed to remain in the circulation would soon destroy life, makes this organ one of vital importance. Anything interfering with the excretion materially hinders the secretion of urine.

Retention of urine is due to atony, paralysis of the detrusor muscles, spasm of the sphincters—usually reflex—and obstruction at the neck of the bladder or in the urethra. Whatever interferes with the vesicle center in the spinal cord, such as locomotor ataxia, Pott's disease, general paralysis, sclerosis or cerebro-spinal injuries, causes paralytic retention. The muscles may be directly paralyzed by inflammation extending from the mucous coat or peritoneal investment (due to peritonitis) over distension or degeneration of muscular fibers caused by prolonged or exhausting diseases.

Spasmodic retention may follow shock or injury, operations on the spermadic cord, rectum, testicles, or prolonged voluntary retention, hence the importance of watching the bladder and using catheter for a few days following such operations. Obstructions may be due to tumor, impacted stone, clot, foreign body, prostatic hypertrophy or inflammation. Retention may be of sudden or gradual onset, and may be partial or complete.

Sudden and complete retention is seen in cases of rupture of the urethra, impacted stone or reflexly following operations, etc. In these cases the symptoms are so plain that a diagnosis

is easy. These symptoms are steadily increasing pain, a constant desire to urinate, with recurrent and unavailing efforts, tenderness over the bladder, with tumor, dull or percussion, globular in shape, and often extending up to the umbilicus. Rectal and supra-pubic palpiation shows the presence of a fluctuating tumor in the region of the bladder.

Gradual retention may develop so insidiously that it is not detected until direct examination shows the presence of a distended bladder. This form of retention is due to urethral stricture, atrophy of the detrusor muscles, lesions of the cord, intra and extra cystic bladder growths, or inflammations and enlargement of the prostate gland. Since the bladder is always partially filled with residual urine, the first symptom noticed is frequent urination, with but little force, which diminishes toward the end of the urination, and usually with much diminished volume.

Even if the vesicle muscles are healthy, the flow of urine is so obstucted that the time required to empty the bladder is so long that the voluntary detrusor muscles become tired and relax before the bladder is entirely emptied, and leave a certain amount of urine in the bladder. The residual urine is proportionate in quantity to the degree of obstruction encountered in the urethra, vesicle neck and to the loss of tone of the bladder muscles. When sterile and moderate in amount, the only symptom it causes is frequent urination. The cause of this is obvious. The bladder can retain comfortably only about ten ounces of urine, and if five ounces are left in the bladder after each urination, the kidneys will have to secrete only five more ounces until the bladder will have to be emptied again.

Because of the unrest and irritation of frequent micturation, with more or less sustained tension, when the residual urine exceeds from four to six ounces, chronic congestion is the result. This is often greatly augmented by cystitis and fermentation of the stagnant urine.

As the obstruction increases and the muscles become atonic or atrophic from whatever cause, the bladder is more and more distended until it becomes enormously dilated. When this gradual retention occurs in the course of fevers, it is due to degeneration of the detrusor muscles and to the abolition of the normal reflexes. The sphincter muscles give way as the bladder distends, and this is followed by incontinence. This same distension develops in prostatic hypertrophy, and occasionally with incontinence. Incontinence of urine should always lead to examination for an over-distended bladder. Whether the retention is complete or incomplete, the intra-vesicle tension is abnormal and far-reaching in its results.

Effects of Retention.—As previously stated, it has been shown experimentally that even a moderate amount of residual urine, say three or four ounces, causes distinct vesicle congestion, which if not relieved will be followed by bloody extravisation, involving often the whole thickness of the bladder walls, and pronounced epithelial desquamation. This pathological condition is not confined to the bladder but extends into the uterus, kidney pelves and tubules of the kidney. Ecchymosis in the parenchymatous por-

tion of the kidneys is often very marked.

When the detrusor muscles are paralyzed, the bladder remains absolutely flacid, even though the urine be drawn. The desquamation of the epithelium from the bladder, uterus and kidneys, which, when unbroken, prevents absorption from the genito-urinary tract, exposes the lymph and blood-channels, and allows the absorption of toxic substances, and when the bladder is infected, rapidly extends up into the ureters and kidney pelves, and instead of a simple retention you have to contend with pyelo-nephritis. It is not until acute retention has lasted more than 24 hours that the bladder, prostate, ureters and kidneys are enormously congested. At first the kidneys are excited to increase activity, and as the pressure increases, secrete slowly or not at all. In such a condition you can readily see that the whole urinary tract is ripe for infection; absorption takes place readily and the normal excretion of toxines is inhibited

Chronic retention, which of course is incomplete, produces pathological alterations of less immediate danger than those of acute retention. When the retention is moderate the changes are limited to the bladder, but if it is as much as six ounces there is chronic congestion of the entire urinary apparatus, with pronounced susceptibility to infection. Fever, if present, is usually due to infection, and the temperature is normal or sub-normal in both acute and chronic retention. There is more immediate danger in acute than chronic retention, but the ultimate results are the same.

Relief of tension, in both acute and chronic retention, is called for as soon as posible, and should be done with utmost antiseptic precaution. Sudden evacuation of the bladder, in cases of chronic retention, often causes hemorrhage from the bladder and kidneys, as well as into the substances of these organs. This is less liable to occur in acute than in chronic retention. It is due to sudden relief of pressure to which the engorged vessels have long been accustomed, and because of this fact the bladder should not be emptied entirely at first, but be replaced by a normal salt solution, and the amount of fluid in the bladder should be gradually reduced until it can be entirely removed. The evacuation of the bladder often so completely relieves congestion that the power of micturition is restored; and especially is this so in acute retention, but usually catherization must be continued for some time, and as often as necessary, this depending on the activity of the kidneys and the amount of residual urine, not allowing more than ten to twelve ounces to accumulate before being drawn.

Prostatic Retention.—From an etiological standpoint, White and Martin classify retention of urine as follows:

1. Retention due to paresis or incordination of the bladder muscles.
2. Retention from congestion or acute inflammation.
3. Retention due to blocking of the urethra by clots, foreign body, stone or portions of new growths.
4. Retention caused by prostatic enlargement.
5. Retention caused by stricture.
6. Retention due to traumatism.

For want of time I shall briefly call your special attention to only three of these six general causes.

1. Retention due to paresis or incordination of bladder muscles.

This form of retention is due to failure of the detrusor muscles or loss of control over the sphincters, and is common in cerebral and spinal cord injury or disease, shock, hysteria, peritonitis, exhausting diseases, voluntary retention, perivesical inflammation and following operation on the rectum and spermatic cord. The symptoms and diagnosis of retention have been referred to above, and I shall say here only that when retention develops without apparent cause and with no previous history of urethral or bladder trouble, close search should be made for ataxia. In every case of retention careful examination should be made for stricture and enlarged prostate regardless of the history obtained.

Treatment.—Retention caused by hysteria is usually relieved by hot enema, followed by hot sitz-bath, the patient being instructed to pass the injection while still in the bath. This treatment is usually efficient in anal operations, inflammation, shock and voluntary retention, but usually the catheter should be used for retention following anal operations, and always for that due to any of the above causes, if relief is not obtained from the use of the hot enema and bath, and not trust to medicines.

When a catheter is to be used the same care should be exercised by the surgeon as if he were going to perform a major operation, since the intense congestion of the bladder and proliferation of epithelial cells make the bladder and kidneys very susceptible to infection. The surgeon's hands should be thoroughly cleansed, the patient prepared as if for a major operation, penis down through a slit in a sterile towel, urethra irrigated with a mild antiseptic solution; then a No. 16 rubber catheter is lubricated with sterile oil and passed into the bladder, and if the retention is acute and of short duration all urine may be withdrawn, but if chronic and not more than eight or ten ounces at most should be drawn off. Then the bladder should be irrigated with normal salt solution by putting into and withdrawing from the bladder a certain amount of this solution, say from four to six ounces, and this way displace the remaining residual urine with the normal salt solution.

If the bladder is suddenly emptied, and especially if there is infection, severe hemorrhage, involving the kidneys and their pelves, is liable to occur, causing partial or complete suppression of urine and death. When retention is due to central nervous lesions, as in ataxia, Pott's disease, or to muscular degeneration, as in typhoid fever or arterio-sclerosis, regular and frequent catheterization is indicated. Because of the hyper-secretion of the kidneys from the undue pressure to which they are accustomed, it may be necessary to catherize from four to six times in 24 hours. The bowels should be regulated by enemata or salts. In all these cases urinary antiseptics, such as salol, urotropin, cystigen, etc., should be given by the mouth, and strict attention paid to hygiene and diet.

2. *Retention of Urine from Stricture.*—This cause must be distinguished from that of enlarged prostate, since the treatment of the two differ greatly. In both cases we have frequent urination with slowness in starting the stream. The urine flows easily and with little delay during the day in prostatitis, but at night and early morning with less ease and more frequency. Rectal examination usually shows enlarged prostate when due to prostatitis.

Frequency is more pronounced during the day in stricture; less delay in starting the stream and usually more dribbling. There is distinct remission of symptoms at night until retention is well advanced. Congestion produced by excess in drink, sexual indulgence, chilling of the surface, passage of a catheter or sound, may cause retention at any time. It may develop from some cause in cases of stricture of large caliber without preceding history of frequent urination. The bladder is usually hypertrophied, and when there is only a small amount of residual urine on account of the undue tension, the surgeon should be called early.

Diagnosis.—The diagnosis is founded upon the exploration of the urethra with acorn bougies, introducing first the largest the meatus will admit, and gradually reduce the size until you pass the obstruction, and thus locate the strictures and ascertain their caliber.

Treatment.—Spasm and congestion being the principal causes of acute retention from stricture, the hot bath, hot enemata, opium, and belladonna suppositories are often found sufficient. Should these fail you should promptly catherize. A number 18 or 20 French sound may be introduced into the bladder. If this fails, fine conical and rat-tail soft catheters should be tried next. If these fail filiform bougies should be used; gently manipulating until one enters the bladder, and if only one can be introduced it may be tied, with the full assurance that enogh urine will leak out to relieve tension, and that the stricture will be sufficiently softened in a short time to admit a larger instrument and the urethra gradually dilated.

If all these fail then aspiration is indicated followed by perineal section and cutting or forcibly dilating the stricture.

3. *That Due to Prostatic Hypertrophy.*—It is strange that until half a dozen years ago a disease occurring in from 22 to 30 per cent. of all males past middle life, and capable of producing so much suffering and so great mortality, has received so little attention at the hands of the medical profession. It has been recognized since the days of Hippocrates, and the same chain of symptoms given, but with no treatment save the catheter. During the last half dozen years the profession has awakened to the great necessity of a better form of treatment, one that would promise the sufferer more than the average of four years which statistics show to be the average length of life of an individual after the prostate so obstructs the outlet as to require the use of the catheter.

Of all forms of urinary retention that due to prostatic hypertrophy is the most frequent; and in order to discuss the treatment intelligently it will be necessary to look into the etiology and pathology of prostatic hypertrophy somewhat closely. These are not as well understood to-day, it seems, as might be; but with the present light before us, as the results of the untiring energy and research made during the last six years by Motz, Albarron, Guyon, Harrison, Ciencanowski, Green, Brooks, Hugh Young and others, may we not justly look forward with hope and expectancy to that day in our generation when those near and dear to us, bowed by years of toil and care, may be enabled to lie down and sleep calmly and peacefully as a little child, so far as prostatic annoyance is concerned, and thus make that period of life, so much dreaded to-day by the aged, free from

the suffering and ill-health produced by prostatic hypertrophy.

This gland is composed of 30 or 40 compound recemose glands imbedded in an abundant stroma of connective tissue and broad, short muscle cells with ovoid neuclei. These muscle fibres are so arranged as not to act as sphincter or accelerator urinæ.

Green and Brooks reported in "The Journal of the American Association," which came out April 26th, the results of a series of 58 cases microscopically examined by them, with the view of determining the most frequent cause of prostatic hypertrophy—which I would advise each of you to read carefully—with the following results:

1. They found abundant evidences of inflammation in every gland.

2. The same gland often showed several different types of inflammation, though the most common one was interstitial hyperplasia, followed by atrophy of the muscle cells of the gland.

In 41 of these cases the increase in size was chiefly or entirely due to fibrous proliferation, but in 36 cases inflammation played a leading role, and in 19 cases cystic distension of the alveoli was present in sufficient degree to increase the size. In six, tumors were present; three fibroma from the interstitial tissue and three from the epithlium—epithelioma. No cases of true glandular or muscular hypertrophy were present.

As stated above, instertitial hyperplasia is the most frequent cause of hypertrophy, and this is recognized generally as being produced by inflammation. In all organs acute or sub-acute inflammation gives rise to hyperplasia, and especially is this so in the prostate gland, as it is an organ abundantly supplied with blood vessels and highly cellular connective tissue.

With the cessation of acute inflammation following a removal of its cause interstitial hyperplasia should cease and retraction and atrophy follow from the sclerosis of the fibers. Such is the result in favorable cases of prostatitis in the young, and we have as a result the atrophic or small hard prostate. In the middle-aged or old man, where we have more or less arterial sclerosis, resolution and healing do not take place so readily, and instead of cessation of connective tissue hyperplasia, the condition becomes chronic, the blood vessel and lymphatic walls are thickened, the gland is congested, edematous, with proliferation of epithelial cells and continued hyperplasia. As the result of this growth alone, when continued for a long time, we have prostatic hypertrophy. If the fibrosis be marked in the peripheral portions of the gland the walls of the alveoli are encroached upon, thickened and obliterated. If hyperplasia is most marked in the central portion of the gland, we have occlusion of the ducts. The glandular epithelium continuing to secrete, distension of the acini and alveoli takes place, hence the familiar cystic adenoma of the prostate.

Surgeons and pathologists admit that such conditions predispose toward cancer of the mammary gland; then why not expect the same thing in the prostate gland where you have chronic interstitial proliferation compressing and irritating the aveolar epithelium?

The conclusion reached by Green and Brooks, in the study of their 58 cases, was that most frequently prostatitis is due to posterior urethritis, and posterior urethritis is usually, primarily or secondarily, of gonococcic origin; and

that the prostatic hypertrophy is a direct result of chronic prostatitis. Then by the same chain of evidence we are forced to the conclusion that it follows posterior urethritis from whatever cause.

They briefly sum up their conclusion as follows:

"1. Prostatic hypertrophy in the aged is the result of chronic prostitis.

"2. It most frequently arises from chronic posterior urethritis, of whatever cause.

"3. True neoplasms of the prostate are rare and are not concerned in the production of prostatic hypertrophy.

"4. Carcinoma is apt to occur in the hypertrophied prostate as a result of the chronic inflammatory process."

Symptoms.—In prostatic enlargement, as the growth increases, elevating the vesicle orifice, there is partial retention, a certain amount of urine is left in the bladder after each micturation, which, if sterile and does not exceed four to six ounces, causes no symptoms save increased frequency of urination and the habit of rising once or twice in the early morning to empty the bladder. As the obstruction increases the amount of residual urine increases, the desire to urinate more frequent and more urgent, with slowness in starting the stream, and especially at night, and the stream is projected with less force. Finally the walls of the bladder give way to the increased tension, and the viscus becomes greatly dilated. If the retention is sufficient to distend the bladder and dilate the ureters and kidney pelves, we have albumen, epithelium, blood, pus and tube casts in the urine, and especially is this the case when we have infection. This dilitation, of course, involves the ureters and kidney pelves. The secretion of the kidneys is interfered with and uremia develops, characterized by gastro-intestinal disorders, and finally death ensues. When distension is great we have constant dribbling of urine. Should infection take place and cystitis intervene, the vesicle symptoms are very much augmented. Pain and tenesmus are then added to the frequent micturition. If the enlarged prostate becomes suddenly congested in the course of incomplete retention from infection, exposure to cold, sexual excesses, or from whatever cause, there will be acute retention with the usual symptoms of acute retention which are referred to above. [Occasionally we have seen perineal pain or pain just back of the meatus, and especially is this so in acute prostatitis. It is seen in men past middle life. There is a history of frequent urination with night rising to empty the bladder.] Rectal examination shows an enlarged prostate.

On passing the catheter, the urethra is found to be abnormally long. This should be about eight inches, and is measured by pasing a catheter in till the urine begins to flow, then withdraw and get the length of catheter from the meatus of penis to the eye of the catheter. A full bladder may be recognized and certainly so if retention is marked. The withdrawal by catheter of residual urine immediately after micturition with the above symptoms is sufficient for a diagnosis of prostatic enlargement; but if further evidence is desired the use of the cystoscope will reveal the exact condition of the gland. The cystoscope should always be used before doing any operation on the prostate gland, and especially so before doing the Bottini operation, in order to get a

mental picture of the vesicle portion of the gland, determine the number of incisions to make and their location.

Treatment.—Posterior urethritis and prostatitis, being the most frequent cause of prostatic hypertrophy, should not be allowed to become chronic, and thereby eliminate the greatest cause of prostatic hypertrophy. The means devised for the treatment of retention of urine due to prostatic hypertrophy are, first, those measures which tend to reduce prostatic inflammation and consequent cystitis, such as massaging the gland, electricity, deep instillations, irrigating the bladder with antiseptic and astringent solutions, and thus cure cystitis and relieve prostatic congestion; second, the drainage method or catherization. This may be continuous or at regular intervals, preventing the accumulation of residual urine; irrigate the bladder with various solutions and in this way relieve prostatic congestion.

Both of these methods are objectionable, as they promise no cure, but only relieve the symptoms of cystitis. Catherization, however, does prolong life and make it more tolerable for the patient. Perineal and suprapubic drainage may be classed with the drainage method of treatment, but affords no more permanent relief.

Castration has been tried, and in some cases proved to be profitable, but has been abandoned by its former most earnest advocates.

The Bottini operation in selected cases of obstruction may give the desired relief, yet this is an operation in the dark and in a septic field. It is advisable only in well-selected cases. There is danger in the operation as well as from septic absorption.

Furthermore, the results are not as good as we would like to have. Statistics show about 15 per cent. failures, 34 per cent. partial failures, and about 7 per cent. death rate in the hands of our most skillful operators. The work done at present is probably much better than formerly, and I believe with Dr. Hugh Young's modification of the Bottini instrument, we will have a much greater per cent. of cures than ever before. Instead of one, he has three blades of different lengths, in order that the length of the incision may be made in accordance with the size of the prostate. Often the small, hard prostate gives a great deal of trouble, and a very small incision is sufficient for a cure.

The next operation I wish to speak of for the cure of this form of retention is prostatectomy, both supra-pubic and perineal. Of course the operation is a very extensive one, and in extreme cases careful choice should be made between a radical and a paliative operation. This is the most sensible operation, it seems to me, as it removes the entire seat of the trouble, assuring us that if the patient recovers from the operation he will have no further trouble from this disease.

The procreative powers are destroyed by this operation, and in some of the cases the sexual powers as well. This fact has great bearing upon the choice of operation in early life, and should have due consideration by both patient and surgeon.

The greatest objection to the suprapubic operation is that the prostate gland lies below the wall of the bladder, and to remove the gland by this route it is necessary to destroy a part of the base of the bladder or entire prostatic urethra. In this operation there is great danger of injuring the ureters, and especialy so when the prostate has

rown into the bladder. If the patient as thick abdominal walls or a conracted and thick bladder wall, it is almost impossible to bring the field of peration within view, and the operator s forced to tear out by means of biting orceps and the fingers parts of the base f the bladder and gland without knowng how much damage he is doing to he internal sphincter or ureters. This s the operation of choice, however, vhen you have enlarged prostate with tone in the bladder, and especially if ou have pedunculated prostatic growths into the bladder, which is often the case.

Perineal prostatectomy, it seems to ne, is an operation founded upon sound principles. It is sound anatomically, because the posterior portion of the prostatic urethra is removed, thus allowing easy access to the new growth. The base of the bladder and internal sphincters are not injured; free drainge is secured, and the capsule of the gland is left, to which the principal supports of the bladder are attached. Septic cystitis is not at all likely to occur, nd if present is soon relieved because f the establishment of free drainage. f great care is taken not to destroy he internal sphincter, the danger of vacuating the bladder suddenly, with s ill consequences, may be overcome o a certain extent.

It seems to me that this is the most cientific operative precedure for the ure of retention of urine due to prosatic hypertrophy, and one destined to ccomplish much for the relief of the ls caused by this compliction of retenion. For a description of these differnt operations I refer you to your textooks.

The Surgical Treatment of Chronic Ulcers.

By James M. Parrott, M. D.,
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Of all the commonplace diseases which afflict mankind, a foul chronic ulcer of the leg is probably the most disagreeable. The proper treatment of this condition seems to be really but little understood. In my experience most doctors dismiss them with some placebo or at best after a few weeks give them up as incurable. No more erroneous idea can possess the physician. I know of no chronic disease more easily or quickly cured than chronic ulcers, should the proper treatment be employed. This does not consist of salves, powders, lotions, etc. This line of treatment will, to state it mildly, do the sufferer no good.

Chronic ulcers are surgical, and must be treated as such. It is very important, however, to search for the cause and correct that first. Many of these cases are syphilitic, and in such we must institute the usual antisyphilitic treatment for several weeks at least before operating. The ulcer itself in these cases is usually very foul, and must be curreted thoroughly, particularly the hard indurated edges.

Tubercular ulcers should be curetted if very dirty, and the ragged edges removed. Iodoform locally is a very valuable help, and the usual antitubercular treatment must be instituted rigorously.

Patients with a malarial cachexia must be given appropriate attention, and it is somewhat important that the anemic receive constitutional climatic and dietetic attention. In other words, we must help our surgical procedure

with a proper constitutional treatment suitable for each case, and every one has some cause in the background.

The preliminary preparation or treatment of the ulcer is of some consequence. When these cases are first seen they are generally filled with slough, when practically all of them should be cureted, except perhaps in some instances varicose ulcers. In these, of couse, the proper veins must be ligated before the treatment is directed to the ulcer itself.

When for any reason the curette can not be used, the surface and edges should be cauterized after irrigation with sterile water and peroxide of hydrogen. Brewers' yeast, papoid, etc., have been recommended at this stage. I have never had occasion to use them. All necrosed bone must be removed and local eczemas cured.

After the ulcer has been thoroughly cleansed, whether at once with the curette or more slowly by other means, antiseptic dressings should be applied from time to time until the granulations are strong and healthy. This is best reached by stimulating them with a moist 1-3,000 bichloride dressings, used alternately with calomel or subnitrate of bismuth. Personally, I use the bichloride dressing continuously locally for several days, replacing them every 24 hours. When the surface is filled with granulations I dress it with the bismuth for 48 hours, then irrigate and re-apply the moist bichloride as before for 24 or 48 hours. The ulcer is then ready to perform the operation.

Many fail in this work because the ulcer is not prepared as it should be. It is most often the case that the ulcer has been improperly curetted or cauterized when this is needed, which is generally the case, though not always so. The edges must be removed and the deepest recesses of the ulcer reached. All suppuration must practically cease before the operation itself is performed.

Several high authorities have recently advised the entire removal of the ulcer, and that the surface be grafted at once. This is sometimes the most expedient procedure, though I must confess it has several very objectionable features, which outweigh its advantages in most cases. In my opinion auto are hetero plastic transplantation cannot be compared to the Thiersch method of grafting. Though sometimes it may be necessary or best to use one of them, the Reverdin or Pingraft method is a miserable makeshift, and more often fails than succeeds.

Parenthetically, I may remark that the Thiersch method of grafting is highly gratifying when practiced after the removel of epithelioma, particularly of the face. The wound heals more rapidly, the scar is much smaller, and recurrence is perhaps less frequent.

The instruments needed for a Thiersch method of grafting are really very few. It can be done with two olive-pointed probes and a razor. Sometimes scissors curved on the flat may be of service. The dressings are equally simple, the only things essential being clean oil silk, a few pads of cheese cloth, a small piece of absorbent cotton and two or three roller bandages.

That part of the body (the thigh for example) from which the grafts are to be taken is disinfected, and the ulcer thoroughly irrigated. The ulcer is then shaved very lightly to remove the thinest possible amount of surface. Should there be a little hemorrhage, and there always is, it should be controlled by direct pressure.

The grafts should be as thin as pos-

ible, just going down into the papil-ary layer, and should be large ones. prefer them an inch wide and as long s the ulcer. They should be transfer-ed at once and directly to the ulcer. ach one should be carefully applied, nd all air bubbles and blood clots ressed from under them. Grafts ould lie edge to edge and slightly verlap the ulcer all around.

A liberal use of sterile normal salt olution frequently applied at the point rom which the grafts are taken facili-tes their removal, but I have never een the necessity for floating them in ie solution before they are applied to ie ulcer. It is much easier to tease iem off the razor directly on the ulcer ith the probe.

A general antiseptic is usually re-uired, but I have operated without it. is not so painful as one would im-gine. I have used cocaine, but do not ke it for the reasons which are ob-ious. After the grafts are placed they re covered by two layers of oil silk rips, the second at right angles to the rst, and so arranged that the meshes re sufficient size for the escape of all scharges. Maceration is thus pre-ented and the surface is thoroughly rotected. This is covered with sterile auze and cotton, and the whole snugly ndaged. It is probably best to re-ove the first dressing on the third y, though it may remain even longer. he wound is to be irrigated at each ance with normal salt solution. The e of the oil silk should be continued ntil the grafts are thoroughly united, d then bismuth substituted to pre-nt undue maceration. The drying wder, if continued too long, will rden the tissue to much and must be ed with some caution.

The grafted surface must be protected for some time by any simple surgical dressing. The areas from which the grafts are taken are at once dusted with bismuth and always heal kindly and promptly.

In reviewing my work I find that I have never had but one to fail, and that in a very old and decrepit subject. Even he was much benefited. There is no question but that this treatment is by far the best for chronic ulcers. It is practically absolutely sure to cure, and to cure promptly, with never a recurrence. The Thiersch method is far superior to that of Wolff or Reverdin for chronic ulcers.

From my case book I report the following cases, each representing its own type of ulcers.

Case I. Miss H., age 17; family and personal history negative. Seven years before consulting me she bruised her leg, which soon resulted in the formation of an ulcer. A short time afterward another of traumatic origin developed on the other leg. She was very aenemic and much debilitated. When seen the ulcers were very foul. Appropriate tonics were subscribed, the ulcers cureted and irrigated. Bichloride dressings were applied and continued, occasionally alternating with bismuth, for three weeks. The ulcers were then grafted with perfect success. Four years later there is no recurrence. These ulcers were of three years standing.

Case II. S., 21 years old; white; family history negative, himself a syphilitic. Four years before I saw him he developed an ulcer of the anterior aspect of the leg. When seen the ulcer was foul, ragged edges and covered with lymph. Flax seed and charcoal poultices were ordered, and antisyphilitic treatment begun. Later the ulcer was cauterized

and dressed as usual with bichloride 1-3,000. Fifteen days later the ulcer was grafted in the usual manner, and in a short time the patient was discharged cured.

Case III. Was a varicose ulcer of the usual type. The ulcer was dressed antiseptically, and the veins ligated. Afterward the ulcer was cureted and treated as before described, and later skin grafted. The patient was permanently cured.

Case IV. I quote from an article along this line published by me in the Medical News in 1897: "I was called in consultation to see W. H. T., who exhibited an irritable ulcer, the leg being much swollen and very painful, the patient's temperature being 102.5 degrees F. The ulcer was apparently healthy, but very densely red, the slightest touch causing acute pain. Save a slight malarial cachexia, the young man seemed to be in good health. The ulcer was of six years duration. A moist bichloride dressing (1-3,000), preceded by the application of a four per cent. solution of cocain, was applied, and rest in bed, with light diet, ordered. He was given iron tonic, with Fowler's solution of arsenic. Improvement was very rapid, and eleven days after seeing him I grafted the ulcer by Thiersch's method with perfect success."

Case V. is very interesting. Though not coming particularly under the title of my paper, I report it at this time, since it shows one of the beneficial uses to which the Thiersch method of skin grafting may be applied. I again quote from the above mentioned article. "J. L. N., aged 75. When seen this patient had an ulceration about the size of a silver dollar on the left temple, midway between the outer canthus and the ear. A diagnosis of epithelioma, which was afterward confirmed by the microscope, was made. He readily consented to its removal, which was done the following day. Immediately after the operation the surface was grafted by the Thiersch method and the patient was discharged cured almost without a scar. The whole treatment occupied ten days."

In conclusion, I may say that most all cases were treated by various methods by almost as many doctors with absolutely no success. Seventy-five out of a hundred ulcers receive no benefit from the usual medicinal treatment while 99 per cent. can be cured by the simple operation known as the Thiersch method of skin grafting, if the ulcer is prepared and the operation and the after-treatment directed as it should be.

The Mattison Method in Morphinism

W. P. Ivey, M. D., Lenoir.

This is no advertisement, gratis or compensated, of Dr. Mattison, who is still living. I have not the pleasure of an acquaintance with the gentleman. I have never seen him.

The man with morphinism is like the man of but few shekels in that he is always with us. His habitat is not bounded by zone or any imaginary or fixed line, and he flourishes alike in all seasons. In the United States alone he is one hudred thousand strong. Some of us may never see a case of hemorrhagic malarial fever. Some of us may never see a case of smallpox or milk sickness or leprosy, but every single blessed one of us will be certain to run afoul the unfortunate opium inebriate. And he is likely to be an acquaintance of long standing and not easily shaken. This has been the experience not only of the past, but is sure to be the ex-

perience of the future ad infinitum. Vaccine and antitoxin have over and over again decimated the ranks of possible deadly disease, but none of their uncles, their cousins or their aunts will ever be able to curtail the number of narcotic habitues. Kerosene oil and mosquito netting will work wonders as preventive measures, but no kindred means will ever avail to block the harbor against the invasion of the subtle fleet from Turkey. As long as there is a muscle to contract and contort, as long as there is a nerve to jump and jerk and twist, as long as there is a hollow organ to twist and cramp and turn itself wrong side in, and just as long as the papaver somnifervum continues to exude the same stuff it now furnishes us, just so long will we be called upon to relieve the unfortunate victims of such a combination. I am prompted to write this paper by these considerations, together with the fact that I opine that but few of my brethren have investigated the Mattison method and fewer still have tried it. Hare, in his Practical Therapeutics, devotes a few lines to the consideration and dismisses it with the statement that it deserves a more extended notice. I have given it that more extended notice and trial, and wish to give you the benefit of my experience. I had heard of the Mattison method for a dozen years or more, but had not given it attention enough to even know what it was. Necessity finally drove me to the use of it. Some of you may get caught in the very same trap, and my advice to you is to listen to me, for I tell you positively that I have something of advantage to say to you.

A gentleman had just discovered that his wife had been taking laudanum in large doses for a long time. He was in great distress, and came to me for assistance. He was a man of means, and said the habit must be broken up if it cost all he had. His wife also expressed a desire to be rid of her incumbrance. Having assured him that we had a big job on our hands and might or might not succeed, I began the treatment I had always used up to this time, which need not be detailed here, only to say that it included in this special case sudden withdrawal of the laudanum. They lived six miles in the country, and I heard nothing from them for two or three days, when I was called at midnight to go out to see her. I found her nervous and sleepless, and vomiting everything taken into her stomach. I saw at once that my treatment was no good and that the next thing to do was something else, and I was not long in deciding what that something else should be. Here I was at midnight, six miles in the country, with a woman without sleep and with a nonretentive stomach. I was away from a drug store, with no refined pharmaceuticals on hand and with no disposition to put in the night there in a fruitless effort to get her quiet. What did I do? Well, yes, I simply gave her ninety drops of laudanum. It stuck, of course, and in an hour's time she and the whole family were asleep, and in a little longer time I was asleep in my own bed at home. And my woman, she was an inebriate still. The next morning I went back and began at once the Mattison method, and in three weeks time the woman was well with a minimum amount of trouble.

You will recall, gentlemen, that the Mattison method in short is rapidly filling up the patient with bromide of soda and at the same time rapidly re-

ducing the amount of the narcotic; with the downward stroke pump him full of bromide, and with the upward stroke pump him dry of opium. I use the word full advisedly. I mean physiological and not toxicological fullness. There are two necessary preliminaries to the treatment which must be observed, else the result will be very doubtful, if not a certain failure. First, put the patient to bed, absolutely, as much to bed as if he were in the third week of typhoid fever. Second, have a nurse of firmness, honesty and decision, whose sole duty is to stay with him all the time. The special reasons for these two requirements will appear in the further elucidation of the subject.

In Hare's Therapeutics the method is detailed as beginning with sixty grains of bromide of soda twice daily and increasing the dose ten grains each day for seven days. In the Twentieth Century Practice the initial dose is put down at thirty grains, with the same daily increase for seven days. Dr. Mattison himself now begins with an initial dose of ten grains only, and increases by ten grains each day for ten days instead of seven, the amount of bromide being practically the same in each case. I have not had any experience with the smaller initial dose, having used the sixty grain dose in all cases. In one of these cases, at least, I am satisfied that a smaller amount would have answered the purpose. Dr. Mattison, who of course has had more experience in its use than any one else, now thinks the sixty grain dose unnecessary. I am inclined to think that he is speaking from the standpoint of a hospital physician, and that in general practice the larger dose, thirty grains at least, would be necessary.

Having selected an eligible case, let us begin. At 4 p. m. and 4 a. m. give a dose of the bromide, and at 10 p. m. and 10 a. m. a dose of the accustomed narcotic. For the first few days give the opiate in gradually diminishing doses, and afterwards, when the patient is becoming bromidised, diminish the dose more rapidly, so regulating it that the last dose is given not later than the tenth day. If anything else is required to relieve pain or secure sleep, give a dose of codeine or trional. Dr. Mattison regards codeine and trional as very important, though not necessary factors of his treatment. In the cases in which I have employed the treatment I have not found it necessary to use either one of them. I might find it necessary in the very next case to use one or both of them, but I would hesitate a long time before using codeine. Here again comes in the difference between hospital and general practice. Codeine is all right, if necessary, in hospital practice, but in general practice in these cases I have a prejudice against it on account of its maternal ancestor. In any event, it is rarely called for till after the opiate is entirely withdrawn. Tonics and digestives, especially strychnine, may be given along as necessary, and elimination looked after in the latter part of the treatment. After the first few days the patient grows drowsy, shows no disposition to get up, sleeps most of the time, and shows signs of muscular weakness. There is the bromide breath and may be some hallucinations, delusions and aphasia. The pulse usually falls to 60 or 70, but in my first case it began at 60 and gradually rose to 120, necessitating the use of digitalis.

The rationale of the bromide treat-

ıent is that all the troubles in discon-
ınuing the habitual use of opium, such
npleasant symptoms as yawning,
neezing, aching pains, vomiting and
iarrhoea, come from the reflexes, and
ıese are abolished by large doses of
romide. Remember this, when you
ndertake a case—the citadel to be at-
ıcked is reflexes, and the slogan of
ar must be, down with the reflexes.

What are the advantages of this
eatment? It gets the patient off of
is drug with the least amount of pain.
udden withdrawal is cruel. The
ımily also is saved any amount of
ympathetic misery, and often this
ives the doctor as much trouble as the
atient himself. Second, it is much
ss trouble to the physician; in fact,
is the only treatment he can use out-
de of a hospital without the greatest
nount of worry and annoyance. It
by large odds *the* method for the
eneral practitioner. Having had con-
derable experience both in hospital
ıd out, I have made the statement
at positively I would not undertake
treat a case of opium inebriety with
y hope of success except with the
tient under lock and key. I am of
e same opinion still, but maintain
at the Mattison method is virtually
:k and key. It is chemical or thera-
utic restraint. To be successful you
ıst so bromidize your patient that
wouldn't get up if he could, and
ıldn't get up if he would. I do
t mean by this that there must be
oduced an artificial palsy, but I do
ıan that the patient must be men-
ly and physically satisfied to re-
in abed. This is the milk in the
oanut, and it requires discrimina-
n to know when this point is reach-
Some patients will require more
some less bromide, and some will require adjuvants while others will not. The method must be elastic. As Dr. Mattison himself aptly puts it: "You must mix your bromide with brains." Another advantage: A physician who knows this treatment by experience will use no other. The same is true of the patient. Literature is full of the horrors attendant upon the escape of the opiumist from his thralldom, and I can not say that the pictures have been overdrawn. Many unfortunates of this class forbear undergoing treatment through dread of suffering. A knowledge by experience or otherwise of a possible escape without these horrors would largely swell the number willing to undergo treatment. I confess that this advantage might also work as a disadvantage. The knowledge of a quick and painless release from his habit would cause him to fight less valiantly against its resumption.

In my opinion the Mattison method has no advantage over any other method in making the cure permanent. It does not make the "Keely Klaim." As in any other treatment, the patient must not be dismissed too early, but must be considered a patient for several weeks and be looked after with tonics, restoratives and restricted environments. Are there any disadvantages? To be sure cases must be properly selected. There are some weak, broken down cases in which it could not be used to advantage. It is depressing to muscular tissue, and could not be used where there is marked cardiac weakness. In properly selected cases there are no untoward effects either during or after treatment. One condition may or may not happen during the progress of the treatment, for which you must be prepared, and

that is mental aberration. There is always more or less hebetude of mind, which in some cases, especially when the larger doses of bromide are used, may go on to complete acute dementia or in other cases to mania with hallucinations and delusions. This may or may not be the result of the large doses of bromide, as mental symptoms with delusions and hallucinations often occur in such cases independent of the use of bromide. In any event, you must be prepared for such an occurrence or you will likely be very much frightened. Such symptoms are always transient, and rapidly subside as the bromide is eliminated. There need be no fear of a permanent dementia from a ten-day use of bromide, however often that condition might occur from the long continued use of the drug, as in epilepsy. The family must be warned in advance of the possible mental symptoms, or your position will not be an easy one. In giving this warning, the occurrence should be attributed to the withdrawal of the drug and not to the administration of the cure.

Now this is the Mattison method as I have used it. It differs in some particulars from the method as used by Mattison himself. The hours stated and the number of doses of the opiate given have to be governed by circumstances. They are not arbitrary. He uses the smaller dose of bromide and the larger amount of codeine. He does not put his patients to bed or have a constant attendant, but then he is in a hospital and you and I are not. He has in preparation a book giving full details of his method. If you are sufficiently interested in the method to try it, I would advise you to get this book and read it alongside of this paper, and then treat your patient with bromide and brains.

After I had decided to write a paper upon this subject I was invited by the chairman of the section on State medicine to contribute a paper to his section. As I could not furnish two papers, and as the subject was close akin to a State subject, it was agreed that I should present it under his section and give it a sufficient medico-legal turn as to make it look not out of place. But I find my paper already too long, and must dismiss the subject with only a few words upon its provincial aspect.

The cause of much of the morphinism is laid at the door of the medical man, and I'm sorry to say much of it justly so. The victim will in nearly every case berate the doctor who prescribed the drug, and lose sight of those who subsequently buy and dispense without his knowledge or consent. The doctor has to bear much of the blame that ought to attach to others, and I am here to defend him at the expense of the State. While physicians should exercise the greatest care in the use of narcotics, I think the prevention of their abuse is largely a matter for the State. Strict, uniform laws regulating the sale of narcotic drugs is the *only* way to restrict their illegitimate use.

As to the culpability of the medical man, a case has recently been decided in the English courts in which the doctor was sued for malpractice in that he was the alleged cause of the plaintiff's opium habit. The decision was in favor of the medical man, and the point of law in the decision was that the plaintiff, being a trained nurse, ought to have been aware of her danger. This teaches us a very important

lesson, both in medicine and in law, and it would be well for every one of us to remember it: In every case where it is necessary to use narcotics for any length of time or in any case in which their use is not entirely within your control or likely to give trouble, *always* give unmistakable warning and retain proof of it.

Annual Essay—The Doctor in Literature.*

By Eug. B. Glenn, M. D., Asheville, N. C.

It is my present purpose to speak of the doctor as has been presented in poetry and prose by many of the masters in literature and giving us physicians an opportunity of seeing ourselves as others see us.

"Oh, would some power the gift give us,
To see ourselves as others see us;
It would from many a blunder free us,
And foolish notion."

By some of our greatest authors and novelists we have been so caricatured that the author has shown that he has grasped the true meaning and importance of our calling. By others we have been crudely, coarsely and inaccurately painted so as to incite ridicule or incorrect abuse.

The oldest of the Hebrew poets has borne witness to the antiquity of the profession in his great dramatic poem, the Book of Job; for poor afflicted Job says to his partial friends that they are "forgers of lies and physicians of no value." But Jeremiah had a better opinion of the profession; for bewailing the impenitence of the Jews, he cries: "Is there no balm in Gilead? Is there no physician there?" by this figure indicating the improvement produced by the presence of one of our craft.

In the "Ingoldsby Legends," a series of satirical stories in prose and verse, written by Richard Harris Basham under the pseudonym of Thos. Ingoldsby, Esq., and published about 1840, we have the stroy of the "Leech of Folkstone," which gives an amusing incident of a somewhat irascible English squire called upon by a somewhat timid leech, whom he greets gruffly with: "I will no more of your pharmacy; burn, burn, gnaw, gnaw. I had as lief the foul fiend were in my gizzard as one of your drugs. Tell me, in the devil's name, what is the matter with me." Then comes the faltering question: "What say your other physicians?" "Dr. Phiz says it is wind, Dr. Fuz says it is water, and Dr. Buz says it is something between wind and water." "They are all of them wrong," said Erasmus Blackthorne, and then goes on to say glibly and smoothly: "It is ever the fate of science to be maligned by the ignorant and superstitious." This illustrates the tendency of the present, sometime to berate the absent physician. No young physician should be tempted thus to build up a cheap reputation by decrying his predecessors or contemptuously underestimating the abilities of his professional colleagues.

In the writings of Pilpay we have two fables—one, "A Religious Doctor," fable VI.; the other, "An Ignorant Physician," fable VIII. In the first we note this quotation: "There are some that bear a grudge even to those that do them good." In the second he relates that "there was once, in a remote part of the East, a man who

*Presented to the North Carolina Medical Society at its meeting in Wrightsville, N. C., June, 1902.

was altogether devoid of knowledge and experience, yet presumed to call himself a physician"—possibly the Munyon of India.

Where are the tribulations and difficulties of neurological practice and the impatience of the patient better illustrated than by Shakespeare in "Macbeth?" The Doctor says of Lady Macbeth:

"Not so sick, my lord,
As she is troubled with thick-coming fancies
That keep her from rest.
Macbeth: Cure her of that.
Canst thou minister to a mind diseased,
Pluck from the memory a rooted sorrow,
Raze out the written troubles of the brain,
And with some sweet oblivious antidote
Cleanse the stuff'd bosom of that perilous stuff
Which weighs upon the heart?
Doctor: Therein the patient
Must minister to himself.
Macbeth: Throw physic to the dogs; I'll none of it."

One of the finest descriptions of the surgeon and his work, of students and their manners and methods, has been written by John Brown, a Scottish physician and author, in "Rab and His Friends." In one graphic pen-picture we have the amphitheatre—the surgeon, a man of few words; the patient with her "unforgetable face," pale, serious, lovely, delicate, sweet; her silvery smooth hair setting off her dark gray eyes; her trouble "some kind of an income of the breast," (income, a disease without any known cause); the students rushing in pell-mell to secure the best seats. "Don't think them heartless; they are neither better nor worse than you or I; they get over their professional horrors and into their proper work; and in them pity, as an emotion, ending in itself or at best in tears and a long drawn breath, lessens, while pity as a motive is quickened, and gains power and purpose. It is well for poor human nature that it is so." The operation without anesthesia, the still silent face of pain; the conclusion of the operation; later, in four days the evidence of sepsis; all has been told by the talented author.

Sir Walter Scott, in Dr. Gideon Gray, gives us a fine specimen of those village doctors from whom he says Scotland reaps more benefit, and to whom she is perhaps more ungrateful, than to any other class of men, excepting her schoolmasters. Such a rural man of medicine is day and night at the service of everyone who may command his assistance within a circle of forty miles of diameter, including moors, mountains, rivers and lakes. But his was not the heart that grudged the labor which relieved human misery; and you will often find in him, even under an unpromising and blunt exterior, professional skill and enthusiasm, intelligence, humanity, courage and science.

In literature we can find illustrations of all types of physicians—the pompous physician, the hen-pecked physician, the timid physician, the brutal, selfish type, and the superannuated, antiquated individual who lives upon his former reputation. Bulwer Lytton has described in "A Strange Story" a Dr. Lloyd, zoologist and physician, a tolerably good though never brilliant one, but who in later years rather aged than worked himself into that professional authority and station which con-

fers on a thoroughly respectable man. Becoming involved in mesmerism, he lost prestige, and his chief patient decided that he was cracked, and comments: "Cracked poets may be all the better for being cracked; cracked doctors are always dangerous," and the young and ambitious Fenwick gets the practice of the community. Beware of fads or cerebral localized hypertrophies. There should be a well-rounded development, a symmetrical mental equipment.

When he was called in consultation with Lloyd, Fenwick says: "To me his diagnosis was shallow and his prescriptions obsolete. Doubtless he thought I ought to have deferred to his seniority in years; but I held the doctrine which youth deems a truth and age a paradox, namely, that in science the young men are the practical elders, inasmuch as they are experienced in the latest experiences science has gathered up, while their seniors are cramped by the dogmas they were schooled to believe when the world was some decades the younger. Euripedes said, 500 B. C.: "Man's best possession is a sympathetic wife." The role played by the physician's wife and her influence over him for good or has been well described by George Eliot and by Dickens. In the history Dr. Lydgate, in "Middlemarch," George Eliot, with her masterly touch, shows how a pretty, vain, but narrow woman may stand in the way of all her husband's nobler ambitions. Hear her words: "Lydgate, who had received true vocation, whose intellectual passion predestines him to far-resonant action in the world of scientific research—Lydgate, against whom the temptations of the world and the devil would have been idle, is subdued by that third enemy of man, the world incarnated in the form of a creation (Rosamond) with feminine voice, swan-like throat, perfectly turned shoulders, exquisite curves of lip and eyelid, and, hidden behind these, the hardness of a little sordid soul."

Dickens, in "Bleak House," in the wife of Dr. Allan Woodcourt, paints a very different picture, the true, sympathetic wife, happy and proud of her husband's work. She says: "We are not rich in the bank but we have quite enough. I never walk out with my husband but what I hear people bless him. I never go into a house of any degree but I hear his praises, or see them in grateful eyes. I never lie down at night but what I know that in the course of that day he has alleviated pain and soothed some fellow-creature in the time of need. I know that from the beds of those who were past recovery thanks have often gone up, in the last hour, for his patient ministrations. Is not this to be rich?"

Turning now from fiction to facts, the finest type of the truly sympathetic doctor's wife is perhaps given by the biographer of Oliver Wendell Holmes: "For Dr. Holmes she was an ideal wife—a comrade the most delightful, a helpmate the most useful, whose abilities seemed to have been arranged by happy foresight for the express purpose of supplying his wants. She smoothed his way for him, removed annoyances from his path, did for him with her easy executive capacity a thousand things which he would otherwise have missed or have done with difficulty for himself; she protected him from distractions and bores and interruptions—in a word, she took care of him and gave him every day the fullest and freest chance to be always

at his best, and always able to do his work with cheerful surroundings. If in thus ordering all things with careful reference to the occupations and comfort of her husband, she often gave herself in sacrifice—as no doubt she did—she always did so with such amiable tact that the fruit of her devotion was enjoyed with no disquieting sense of what it had cost her."

The duality of the human composition, the constant warring of the good and bad elements in the individual, the double role sometimes played by individuals of all professions or walks in life, are pictured most vividly and powerfully by the late R. L. Stevenson in his remarkable story of "Dr. Jekyl and Mr. Hyde."

Our American writers have created or described most admirable types of our fraternity both in prose and poetry. Whitman in his unpoetical verse has given us the picture of the wound-dresses, doubtless describing his personal experience as an army nurse:

"Bearing the bandages, water and sponge,
Straight and swift to my wounded I go,
Where they lie on the ground after the battle brought in,
Where their priceless blood reddens the grass, the ground,
Or to the rows of the hospital tents, or under the roof'd hospital,
To the long rows of cots up and down each side I return,
To each and all one after another I draw near, not one do I miss,
An attendant follows holding a tray, he carries a refuse pail,
Soon to be filled with clotted rags and blood, emptied and filled again.
"From the stump of the arm, the amputated hand,
I undo the clotted lint, remove the slough, wash off the matter and blood.
Back on his pillow the soldier bends with curved neck and sidefalling head.
His eyes are closed, his face is pale, he dares not look on the bloody stump,
And has not yet looked on it.
"I dress a wound in the side, deep, deep,
But a day or two more; for see the frame all wasted and shrinking,
And the yellow-blue countenance, see.
"I dress the perforated shoulder, the foot with the bullet wound,
Cleanse the one with the gnawing and putrid gangrene, so sickening, so offensive,
While the attendant stands behind aside me holding the pail and tray.
"I am faithful, I do not give out,
The fractured thigh, the knee, the wound in the abdomen.
These and more I dress with impassive hand,
(Yet deep in my breast a fire, a burning flame.)"

Ian McClaren has given us that sympathetic picture of "a doctor of the old school"—Willie Maclure of Drumtochty. "It was impossible for a doctor to earn even a modest competence from people of such scandalous health as those of Drumtochty, and so Maclure had to annex neighboring parishes. His house—little more than a cottage—stood at the head of the Glen, and from this base of operations he dominated the wild glen that broke the wall of the Grampians where the snow-drifts were twelve feet deep in winter, and the only way of passage at times was the channel of the river, and the moorland district westward, and

lands eastward toward Muirtown. He did his best for the need of every man, woman and child in this wild, straggling district, year in and year out, in the snow and in the heat, in the dark and in the light, without rest, and without holiday, for forty years.

"He could ride faster, stay longer in the saddle, and had a firmer grip with his knees than anyone I ever met, and it was all for mercy's sake. When the reapers in the harvest saw a figure whirling past in a cloud of dust, or the family at the foot of the glen in the night heard the rattle of a horse's hoof on the road, they knew it was the doctor, and without being conscious of it wished him God speed. There were no specialists in Drumtochty, so this man had to do everything as best he could, and as quickly. He was chest doctor and doctor for every other organ as well; he was accoucheur and surgeon; he was oculist and aurist; he was dentist and chloroformist, besides being chemist and druggist as well.

"He was a tall, gaunt, loosely made man, without an ounce of superfluous flesh on his body, his face burned a dark brick color by constant exposure to the weather, red hair and beard turning gray, honest blue eyes that look you ever in the face, huge hands with wrist bones like the shank of the ham, and a voice that hurled his salutation across two fields; he suggested the moor rather than the drawing-room. But what a clever hand it was in an operation—as delicate as a woman's; and what a kindly voice it was in the humble room where there was weeping beside a patient's bedside.

"His fees were pretty much what the folk chose to give him, and he collected them once a year at Kildrummie Fair.

"As he had braved storm and drifting snows and rising floods to visit the sick and dying, so his people came from all the Glen through the greatest snow of the century to his funeral; and of him it was said 'we have buried the remains of one who served this glen with a devotion that has known no reserve, and a kindliness that never failed, for more than forty years. He will never be forgotten while one of us lives, and I pray that all doctors everywhere may share his spirit.' As a text for the cross over his grave the pastor of the parish chose: 'Greater love hath no man than this, that a man lay down his life for his friends.' When some one said 'it was a peety he didna mak mair profession 'o releegion,' Lachlan Campbell, now old and feeble, replied: 'When William Maclure appears before the Judge, He will not be asking about his professions; for the doctor's judgment has been ready long ago; and it is a good judgment, and you and I will be happy men if we get the like of it. It is written in the Gospel, but it is William Maclure that will be expecting it. "Come ye blessed of My Father.... I was sick, and ye visited Me."'"

Management Smallpox Outbreak.

By P. J. Macon, M. D, Warrenton, N. C.

Possibly nothing in the history of the State has so disturbed the minds of the profession and laity as has smallpox within the last four years.

It has traversed this old Commonwealth of ours from moutain to sea, and from border to border, making its unhallowed visits to every county and almost every city and hamlet in the State. Unwelcomed, but still it lingers and hovers around, until it has become domesticated, and seems to be

a part of North Carolina property.

The subject is a complex one, comprising both the medical and the legal side, and must be viewed from many aspects and also under many difficulties. To discuss this subject, one must be cautious, lest he wound the feelings of some, and yet to treat the matter trivially and indifferently would not be just to the one upon whom the responsibility of dealing with devolves.

The management of smallpox is a difficult, arduous task, undertaken never to be half paid or rewarded for the work, if done faithfully, conscientiously and well. The physician, to do his duty, must necessarily expose himself to many conditions, and under many adverse circumstances, exposure to weather, rain and storm, visit badly ventilated houses of filth and poverty. It seems impossible to accomplish anything with such surroundings.

But with an iron will and strong determination to conquer, as a successful physician must have, things seem to be done easily. The demon is here; we are about to meet him unaware of his advent.

What is his history? An insidious, filthy, loathsome, spotted disease, that made its appearance in the world somewhere in the fourth century, history tells us. No one will claim its ancestry positively. Some say it originated in China many years before Christ, while others claim that it existed in India from time immemorial. It is evident that it is hoary with age, but still active and apparently in the bloom of youth—will live many years yet and grow fat, from all indications.

They say America got it from Spain (as we have other troubles) early in the sixteenth century. As there seems such diversity of opinion as to its origin I will not dwell longer on that line. Suffice it to say it is here, and I fear to stay, as it has received such a cordial reception and mild treatment. But why should we fold our arms in humble submission when it seems to me we have the means to drive it from our door and exterminate it from the face of the earth? One asks the question: "How or in what way can it be exterminated? The answer is, by a thorough system of universal vaccination and rigid quarantine regulations.

If I may be pardoned for so doing, I will take up the first part of the answer and relate a little personal experience. On the 9th day of March, 1899, I was called to see a young man about thirty years of age, suffering with an intense headache, excruciating pains in back and limbs, nausea, very restless and nervous, complete anorexia, temperature (sublingual) 105 Farenheit, heavily furred tongue, pulse 120.

Questioned patient as to premonitory symptoms. Said for two or three days had felt badly, with no inclination to move around; also loss of appetite. On the 8th, the day prior to my visit, had felt very chilly; in fact, thought he had a decided chill. As la grippe was very prevalent, and no smallpox existed in our community, I very promptly diagnosed it la grippe. I again visited him in the afternoon, and found him more comfortable, but very nervous. I had already prescribed in the forenoon the usual grippe remedies with directions for tepid sponge bath, as the skin was very hot and dry (this to abate fever and relieve nervousness). Being very anxious as well as uneasy about him, made the third visit. Found him very restless but temperature somewhat reduced. Af-

ter giving ten grains Dover's powder, left him sleeping very quietly. Next morning called early to see him, and found him very much nauseated. To make a long story short, found him decidedly worse, and also delirious. One strange feature was that he laid at full length, in the supine position. I asked him if it pained him to lie on his side and he said it did not. It seemed that he naturally went that way unconsciously; could assign no reason for it. This seemed anomalous. My last visit that day was about 9 p. m. He was more delirious. I gave perorem, one and a half drachms bromidia. In a little while he was sleeping quietly. Next morning, to my surprise and delight, I found him sitting up smoking a cigarette. He expressed himself as feeling well, and further added that he had been down in the dining room and enjoyed a good breakfast with the family. While he was talking I noticed two little suspicious and suggestive bumps, one in the middle of the forehead and the other in the brow. Very naturally I began to feel the little sentinel with my index finger. There must have been a change in my countenance, for there certainly had been in my head. His wife, who was sitting near by, said: "Oh! Dr. Macon, isn't my husband got smallpox?" She seemed to be speak as by intuition.) I said: "He certainly has." he said: "I knew it by your look." That moment I put him, his wife, child and nurse under quarantine. I then went down stairs and quarantined the other members of the family and servants, four in number. I then put the head of the family under $50,- 00 bond "verbally" if they broke the quarantine before I returned. I immediately repaired to my home by the back way, entered my garden, called my servant and ordered him to bring me a tub of water and an entire change of clothing out and out. I also directed him to put them in a certain place which was about fifty yards from me and depart. This being done, I undressed, put a match to them hats, shoes and all; then went to the bath-house, which was beautifully provided for by nature with a canopy of heaven as its top and the freezing winds of March bringing news of melancholy and gloom as its curtain. After my bath you can imagine how I felt. I could hardly pull on my shirt for the horny excrecenses that protruded from my body. I strictly had the "bumps" in mind and body. I went to my dressing room, donned a suit of linen, and hastened back to the most desolate looking spot my eyes ever rested upon, I thought. I then put things under thorough quarantine, left directions, antiseptics, prpared disinfectants, and had the whole household thoroughly vaccinated. I also had two guards employed, one for day and the other for night.

I would like to go into a more minute detail as to treatment, management, etc., but as this is such a comprehensive subject, it would consume too much time of the convention, and possibly intrude upon the right of others with perhaps more interesting and instructive papers. However, I must dwell for a short time on the efficacy of vaccination. There were eight inmates in this infected house, including the patient. None had been vaccinated in several years, and four had never been. It cannot be said that they had not been exposed, for they were with the patient frequently, and some occupied the same room all the time. The

wife had been vaccinated three times, and bore as many very large scars. I considered her immune, and so assured her that she was in no danger. She realized her safety, and was very useful. Being a very intelligent woman, with the assistance of her nurse she managed things beautifully. The entire houshold being vaccinated, in a few days there were signs of successful vaccination in all except the nurse. She was vaccinated in three different places, but without avail. On the 3rd of April she was taken with a chill, other symptoms accompanying. A typical case of varioloid developed. Remember, this was twenty-five days from exposure, but about fourteen days from the beginning of the dessication period. This comes to the point that I would like to make and emphasize, "the period of contagion." Osler says the contagium develops in the system of the smallpox patient, and is reproduced in pustules; it exists in the secretions and excretions, and in the exhalations from the lungs and the skin. The dried scales constitute by far the most important element, and as a dust-like powder are distributed everywhere in the room during convalescence. He goes on further to say that the disease is probably contagious from a very early stage, though it has not yet been determined whether the contagion is active before the eruption develops. This has been thoroughly settled in my mind by close observation received from many standpoints.

Now let's trace this case, in order to corroborate and confirm my opinion. On the 7th patient referred to mingled with the people of the town, possibly seeing several hundred; pulled off his overcoat and loaned to a friend who wore it several hours. Feeling badly, he laid in the bank where the occupants were at work more than an hour. From the 8th, day of chill, to the 11th, the stage of high fever, was seen by twelve visitors, some remaining for more than an hour; a little nephew playing on the bed with him. This takes us to the eruptive stage. After that no one saw him except the attendants, six in number. Among these five showed scars of successful vaccination. The only one who had not been vaccinated was the nurse, the one who contracted the disease. This shows the necessity of early vaccination and also seems to fix the stage of contagion, which I believe is after the stage of supuration or during the stage of dessication; the dust-like powder is inhaled into the lung or taken in the stomach by drinking or eating; being assimilated, is taken up by the blood and thereby poisons the system and develops smallpox; shows itself in the form of pustules where it is reproduced and comes to maturity. And so it multiplies, as if licensed by nature to do its nefarious work on as large scale as possible. This brings us to the duty of the health office. To make vaccination of any immediate or material value during or pending an outbreak, it must be done early, very early, in order to make the community immune as far as vaccination can do it, which is universally conceded to be an absolute protection. Then why delay this very important necessity a moment? In order to make vaccination efficacious there must be harmony and unison among the profession and a concert of action between the superintendent of health, the county and town officials. With this well determined, the laity will be easy to fall in line; but, with

one obstinate physician, he can spoil the whole undertaking, and nothing but force will then be of any avail, and that is very annoying and objectionable. But, if necessary, enforce the law and do it at once, the earlier the better. A kicking, hard-headed doctor, who will not listen to reason, should not be allowed to hinder, delay or possibly thwart this important duty that you owe the people, and imperil the lives of many, besides the great destruction of property, which is small in comparison to the loss of the life of the most unworthy citizen.

With the harness on, go to work and vaccinate the entire county in a short time. This can be done in five days as well as one month.

I am thoroughly disgusted sometimes when I see where Dr. —— vaccinates seventy-five in one day, when it should be seven or eight hundred. Pay the vaccine staff less per capita and they will do more, as a rule. Have vaccine stations, and you will be surprised to see how many will apply for vaccination. They will come from other counties. That is my experience, and I suppose human nature is alike everywhere. People like to congregate in crowds, especially if there seems to be any excitement. Record every name; get a man who knows the people in his district.

After he has vaccinated all that have applied, which will be the bulk, then he can go and take those who have not applied at their homes or places of business. This is hard work, but the condition of things demand it. In five or six days the vaccinated must be looked after, as some may have to be re-vaccinated. Don't be alarmed; you will have some bad-looking arms. Out of the three thousand that I vaccinated (in less than six days) there was not a single serious result, and 98 per cent. were successful. I am satisfied that vaccination has been neglected very much all over the State. I notice in the Bulletin of the North Carolina Board of Health that there are twenty-two counties that have more than one hundred and sixty cases of smallpox. This should not be so. There is a great fault existing in some channel, but as it is not encumbent upon me to find where the omission of duty lies, I will leave the matter to those on whom the duty does devolve. I am sure that our worthy Secretary of the Board of Health has done his part, for he has worked diligently, untiringly and faithfully, and it is obvious that his wise writings and efforts to exterminate this great curse from the State have gone unheeded, and been little appreciated by the great majority. As to quarantine and disinfection, I will refer you to the office of the Secretary of the Board of Health, and upon application you will be sent a small pamphlet from yhich you can get all necessary instructions more fully and complete than I can here describe.

As to the last part of my answer: By strict quarantine regulations. To do this effectually there must be provided a pest house or hospital for the treatment of the affected. This should be located in an isolated spot with ample grounds for all necessary buildings, etc. It should be high and dry, preferably in the woods and near a running stream, as an abundance of water is very essential. House should be as plain as possible, so that it can be thoroughly whitewashed and easily disinfected, but at the same time comfortable and well ventilated. There should be four houses of this kind, one

each for the males and one each for the females of the different races. There should also be provided a house of detention, with kitchen, dressing rooms, etc., all supplied with the requisite appurtenances. Patients with disease should be placed in hospital promptly. As to treatment, there is little to be done in the way of combatting the disease with medicine, but should be carefully nursed by one who has become immune either by smallpox or vaccination, preferably the former. Patient should receive a mild tepid bichloride bath at least once a day, and entire body thoroughly annointed with carbolated vaseline; this is done to destroy the sporadium variolæ and to render the skin soft. Also prevents crusts forming and makes dessication easy and very little pitting will follow. The dust-like powder is prevented on account of the moisture produced by the continuous inunctions. "I emphasize special stress on the above treatment of the skin." Symptoms must be treated as they arise. Be sure to not discharge the patient too early, as there is danger of infecting others by the flying scales. Be certain that his clothing is rendered as thoroughly sterile as possible, and body made antiseptic by baths and disinfectants. Suspects must be detained at least fourteen days from exposure. (This is, I think, the rule.) And if symptoms of smallpox begin to show themselves remove the patient to hospital. Have those who have escaped the disease disinfected before being dismissed. One nurse can take care of ten patients. Clothing, bedding, beds, etc., must be washed or aired often and treated with bichloride or formalin vaporization. The physician in charge should be a sworn officer and should be chief of staff. There should be a well disciplined patrol guard posted day and night. They are to be carriers of packages and supplies from place of deposit to commissary and perform general guard duty. If smallpox continues to make its invasion from other towns or other quarters, why then quarantine against those places is imperative. Have inspecting officers to examine all trains, public carriers, etc., and require them to be thoroughly fumigated. By such a method of dealing with smallpox (as I have briefly outlined) am sure it will soon be something of the past. The health officer should be a physician, a man of an acumen, unselfish and honest, with an eye ever looking to the promotion of health and general welfare and comfort of the people. Such a man will be loved and honored, his devotion to duty admired, his course approved of, his acts applauded, his name lauded, and will go down in history a hero. On the other hand, the slothful and careless one, who has allowed the disease to lurk around and become epidemic, is deservedly scorned at and held in contempt by all, and will ultimately sink into an ignominious oblivion, a just rebuke.

In conclusion, I would suggest that this convention authorize and empower the Board of Health, as a delegation from this body, to memorialize the Legislature and urge them to pass adequate laws in regard to compulsory vaccination, provided our present law is inadequate and impracticable, as it has proven to be in the past, or the enforcement of which has been very much neglected.

Review of Medical and Surgical Progress.

The Preventive and Curative Treatment of Hay Fever.

It is difficult to conceive of a more miserable creature in all the world than the hay fever sufferer. The attack not only makes him exceedingly uncomfortable, but renders him unfit for business or the pleasures of society. Aside from the annoying and continual discharge from the nostrils, the eyes are suffused, the secretion of tears is increased, the nasal passages are obstructed, and an intense burning sensation is experienced; the latter is not entirely limited to the mucous membranes, but not infrequently involves the cutaneous surfaces of the forehead, cheeks and nose. Violent attacks of sneezing occur, which are so prolonged at times as to completely exhaust the sufferer and bring on severe headache. The condition is one of utter wretchedness, and there is extreme malaise, amounting occasionally to complete prostration. The lightest duties become irksome tasks, and many an active, industrious and useful member of society is completely incapacitated while "the season" lasts.

For years some convenient means of relief has been sought. Change of scene does very well for those, unfettered by business, who can afford to travel. But to many very worthy people a change of scene is out of the question. Naturally the greater number of the afflicted are accustomed to look to the medical profession for the help they need. But what has the medical profession actually accomplished for the permanent relief of the sufferer or the cure of his ailment? There is scarcely a sedative, astringent, tonic, nervine or alterative drug in the materia medica that has not enjoyed an evanescent reputation as a useful remedy in the treatment of hay fever. Until the discovery of Adrenalin each had been as much of a disappointment as its predecessor, and none had afforded more than the merest temporary relief.

There is increasing evidence that Adrenalin fully meets the indications as a remedial agent in hay fever. It controls the nasal discharge, allays congestion of the mucous membranes, and in that manner reduces the swelling of the turbinal tissues. As the nasal obstruction disappears natural breathing is materially aided, and the ungovernable desire to sneeze is mitigated. In short, a season of comparative comfort takes the place of the former condition of distress and unrest. Adrenalin blanches the mucous membrane by vigorously contracting the capillaries, and thus reduces local turgescence. It strengthens the heart and overcomes the sense of malaise so frequently a prominent feature in cases of long standing.

In the treatment of hay fever the Solution of Adrenalin Chloride should be used. This preparation is supplied in the strength of one part Adrenalin

Chloride to one thousand parts Normal Saline Solution, and is preserved by the addition of 0.5 per cent. Chloretone. The 1-1,000 solution should be diluted by the addition of four parts Normal Salt Solution, and sprayed into the nares with a "Cocaine" atomizer. In the office, the 1-1,000 solution may be applied in full strength. A small pledget of cotton is wrapped about the end of an applicator and moistened with a few drops of the solution (1-1,000). The speculum is then introduced, the patient's head is tilted backward in a position most favorable for thorough illumination by the head-mirror, and the visible portions of the lower and middle turbinate bodies, and the septum, are carefully and thoroughly brushed. The same application is made to the other nostril, when usually relief follows in a few moments. Should the benefit prove only partial, the 1-1,000 solution may now be sprayed into both nares, and a few drops instilled into both eyes. The effect of this treatment may be expected to last for several hours. Indeed, some physicians report that it is necessary to make but one thorough application daily to afford complete relief.

It is also recommended that Solution Adrenalin Chloride be administered internally in 5 to 10-drop doses, beginning ten days to two weeks prior to the expected attack. In explanation of the beneficial effect of the drug when used in this manner, the suggestion has been made that hay fever is essentially a neurosis, characterized by a local vasomotor paralysis, affecting the blood supply of the eyes, nose, face and pharynx, and occasionally of the laryngeal and bronchial mucous membranes. Adrenalin overcomes this condition, restores the normal balance in the local blood pressure, and thus aids in bringing about a cure. The profession is to be congratulated that it has at last an agent that, if not a specific, fulfills the therapeutic indications more completely and with greater satisfaction than any other measure recorded in the history of medicine.

In the recent report of the cancer laboratory, University of Buffalo, Dr. Roswell Park (*American Medicine*) says that results of the past year tend to confirm the growing belief in the infectiousness of the disease, and also that it is on the increase. The year's study has embraced the problems involved in connection with parasites as a cause of cancer, and their culture on artificial media. Efforts have been made to acclimatize yeasts, fungi protozoa, etc., to development in living animals and to the foundation of tumors, and also to cultivate parasites from cancerous material on artificial media, and to facilitate their growth and development in animals. Investigations along physiologic and chemic lines have been carried out and many experiments made, especially those of a microchemic nature, with the idea of verifying the pathologic work. The examination, comparing and indexing the work and results of others in various parts of the world have occupied much time. —*Medical Age.*

To prevent smallpox from developing on troopships Lieutenant General Miles has directed that troops ordered to the Philippines shall be provided with certificates showing that they were inspected before leaving their stations and were protected from smallpox.—*Medical Age.*

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THERAPEUTIC HINTS.

Care of the Breasts in Nursing Mothers.

Dr. G. Barksdale, in *Western Druggist,* recommends in the treatment of tender nipples that the nipple be painted over with glycerite of tannin and alcohol for several days. If they become fissured they should be painted with tincture of benzoin or boric-acid solution. When the flow of milk is more than the child can use, it is best to withdraw some of it to prevent pain to the mother. When the symptoms of abscess appear the child should be taken from the breast, the milk withdrawn and the tumors, produced by the overdistended ducts, should be massaged until they disappear, or the breast annointed with an ointment composed of camphor, opium, belladonna and lanolin. The pulverized jalap compound should also be given to secure free movement of the bowels and to promote diuresis. If the symptoms continue, use hot fomentations until the abscess forms, and then open.

To Create a Distaste for Drink.

Jergolski claims that eight drops of tincture of strophanthus three times a day will create a distaste for drink.

The following prescriptions have been recommended for alcoholism:

℞ Auri et sodii chloridi, gr. 1-24.
Strychnine nitratis, gr. 1-60.
Nitroglycerini, gr. 1-100.
Atropinae sulphatis, gr. 1-200.
Digitalini, gr. 1-60
Sodii chloridi, gr. 1-8.

M. ft. tablet No. 1. For hypodermic use.—*Dunham.*

℞ Spir. ammonii aromatici, ʒij.
Tinct. camphorae, ʒiss.
Tinct. hyoscyami, ʒiss.
Spir. lavandulae comp., q. s. ad. ʒij.

M. Sig. One teaspoonful every hour.

To prevent adynamia, Tyson recommends the following to prevent the adynamia which may follow the sudden withdrawal of alcohol:

℞ Spir. ammonii aromat., ʒ ½.
Strychninae, gr. 1-30.

M. Sig. For one dose. Repeat every three hours.

To relieve the symptoms of gastritis and the craving for alcohol, the following is recommended:

℞ Decocti althaeae, ℥v.
Aq. chlori.
Sacchari, aa ʒij.

M. Sig. Tablespoonful every two or three hours.—*Zedekauer, Ex.*

Cystitis.

Dr. B. Foster, in *St. Paul Medical Journal,* states that in the treatment of cystitis, when the urine is acid in reaction, the following preparation containing lipuor potassæ is the most useful:

℞ Liquoris potassae,	ʒii	8
Mucilaginis acaciae,	℥i	30
Tinct. hyoscyami q. s. ad.,	℥iv	120

M. Sig. One teaspoonful every four hours in water.

If the urine is already alkaline, and particularly if it has undergone ammoniacal decomposition, urinary antiseptics are indicated, such as salol, boric acid, sodium benzoate or urotropin.

Do We Really Need It?

Beef, Iron, Cinchona and Brandy go to make it. Any one of these given alone would do good. Consider, then, how much the benefit could be increased by combination!

"The stimulant action of Extractum Carnis has been considered almost equal to that of alcohol, and bulk for bulk, it is certainly much greater. Two-fifths of an ounce of the Extract represents one pound of mutton." W. GILMAN THOMPSON.

"Iron is a food—not a medicine. Of the value of iron in anæmia and chlorosis, there can be no doubt." H. C. WOOD.

"Cinchona is extremely serviceable in atonic dyspepsia, gastric catarrh, adynamia, convalescence, asthma and chronic bronchitis." SAMUEL O. L. POTTER.

"Alcohol is the savings bank of the system. He who eats little and drinks alcohol in moderation retains as much nutrition in his blood and tissues as he who eats more and drinks less." MOLESCHOTT.

It isn't a question of merit—we don't ask, "Is it good for something?"—but rather one of superiority—"Is it better than any other thing?". Every one of us knows the value of Beef, Iron, Cinchona and Brandy; but Colden's Liquid Beef Tonic is worth "all put together." Its powers have been tested and its virtues demonstrated by thirty years of severe clinical experience. It's known too widely now to need further introduction—we wish merely that you renew the acquaintance if forgotten. We provide the profession with two distinct preparations: "Ext. Carnis Fl. Comp. (Colden), Formula No. 1, with Iron; and Formula No. 2, without Iron." Sold by druggists generally.

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MEDICAL NEWS AND ITEMS.

Yellow fever has again broken out in Vera Cruz, Mexico.

For the first time in two or three years, Mecklenburg county, N. C., is free of smallpox.

The Paris courts have settled by legal decision that two dollars be the ordinary visit fee of a physician.

Scarlet fever is reported in Chicago as more prevalent and more fatal than at any time during the past twenty years.

The Free Medical Dispensary of Chicago in connection with the medical schools of that city gave aid last year to 105,939 patients.

The bill to permit the retirement of Surgeon General Sternberg with the rank of major general was defeated in the House of Representatives.

The University of Pennsylvania has recently received gifts amounting to $20,000. Of this amount $15,000 will be expended in new medical laboratories.

A petition has been presented to the German Reichstag signed by the physicians of the German Empire, asking for the cremation of those dying from the plague or cholera.

The expectoration ordinance is being enforced in New York. Of fifty spitters tried in a single week, eighteen were discharged after incarceration for six hours or longer, and thirty-two were fined $5 each.

Joseph J. Kinyoun, late surgeon of the Marine Hospital Service and director of the Hygienic Laboratory at Washington, has assumed the directorship of the biologic laboratories of the H. K. Mulford Company, at Glenolden Pa.

The trustees and faculty of Chattanooga Medical College have just completed the erection and equipment of another splendid new building, at a cost exceeding twenty-five thousand dollars. This will amply accommodate the several laboratories and the anatomical department, which had hitherto been crowded and hampered. The new edifice is three stories high, of brick and stone, handsome in appearance, and specially designed by the architect to meet all demands for the most advanced modern teaching of medicine in the pleasantest and most practical manner attainable. The new building is one of the largest and best arranged medical buildings in the South.

Changes in the Medical Faculty of the University of Maryland.—Dr. J. McLane Tiffany having resigned the chair of surgery in the University of Maryland faculty of physic, Dr. Randolph Winslow was on Friday elected professor of surgery. Dr. John Holmes Smith was elected professor of anatomy, Dr. D. M. R. Culbreth professor of materia medica, Dr. Frank Martin and Dr. St. Clair Spruill clinical professors of surgery and Dr. Joseph W. Holland demonstrator of anatomy.

Newer Materia Medica.

Why Coca is a Panacea.

How many of our readers appreciate true value of Coca as an all-around nedy! Not Cocoa, from which choc- te is made, but Coca, from which t potent substance cocaine is pro- ced. It requires one ounce of Coca ves to make one grain of pure Co- ne, and that alkaloid is but one of ny contained in these marvelous ves. It is because of the modified ion of all the constituents that the ole drug is possessed of different rapeutic properties, and is specifically ater than any one of its parts. Coca a nervous stimulant, acting primar- on the cerebral cells, but in this ac- n having an elective affinity for the piratory center and a chemico-phys- gical depurative influence on the od. It is from this latter cause that ca has such a widespread usefulness, ich seemingly classes it as a pana- for all ills. With a purified blood eam, the organs of assimilation and muscular and nervous systems are only reparired, but maintained in ilibrum.

Unlike any other nervous stimulant, ca is not followed by depression, ugh in full doses a brief period of pression may precede its physiologi- action. This indicates the employ- nt with Coca of a deffusible stimu- t which after an evarnescent period edily gives place to the influence of drug. The difference between the action of alcohol and Coca is well illustrated in the anecdote of the Andean Indian, who, given a first taste of whiskey and asked his idea of its effects compared with Coca, replied: "Coca helps a man to live, but whiskey makes him row a boat."—(*Mortimer's Peru: History of Coca, p. 224.*) Thus the combination of wine with Coca, such as in the well-known Vin Mariani, is not only purely scientific, but a commendable preparation that presents an agreeable means of exhibiting the positive merits of properly preserved Coca.

Dysentery and Flatulence.

The griping pain and flatulence which accompany bowel and stomach complaints, particularly during the heated term, are so readily overcome and controlled by the timely administration of one or two Antikamnia & Salol Tablets, repeated every two or three hours, that it behooves us to call our readers' attention to the grand efficacy of this well-known remedy in these conditions. The above doses are, of course, those for adults. Children should be given one-fourth tablet for each five years of their age. When the attack is very severe, or when the disturbance is evidenced at or near the time for the menstrual period, we find it preferable to give two Antikamnia & Codeine Tablets, alternately with the Antikamnia & Salol Tablets. The latter tablets promptly arrest excessive

fermentation and have a pronounced sedative effect on the mucous membranes of the bowels and stomach, and will check the various diarrhœas without any untoward effect.

A Word to You, Doctor.

To facilitate the filling of prescriptions calling for such drugs as arsenic, atropine and strychnine, when it is preferable to give them in solution, as is often the case, you will find Dispensary Tablets, made by one of our oldest and most respected advertisers, to be of great aid. We refer to the Dispensary Tablets made by Sharp & Dohme.

I am thoroughly satisfied with the results I obtain from the use of Peacock's Bromides. I prescribe it with much confidence, and while I have seen others said to be "just as good," I do not tolerate them, but consider this a splendid recommendation for the preparation. H. A. SCHRAEDER, M. D.

Braymer, Mo.

In papine advanced pharmacy has given us a perfect opium preparation. It possesses the anodyne virtues of opium and not the constipating and untoward actions. Papine may be briefly defined as the only opiate which is free from the evil effects which I have just named. It is very prompt in this respect, excelling any other opiate, and it never produces nausae, constipation and the usual woes that go hand in hand with the old-time opiates. Papine is, therefore, the remedy which is indicated in all forms of inflammatory pain. It is given in doses of one teaspoonful every one, two or three hours, until its anodyne action is attained. In giving papine we can bear in mind that a teaspoonful represents the strengt of one-eighth of a grain of morphin Having this fact in mind, the dosag which is appropriate in any case will once suggest itself.—Extract fro "Remedial Measures Indicated in A fections Attended With Pain," by S. Trotter, M. D.—*New Albany Me ical Herald.*

I regard Seng as one of the best, not the best, remedy that I have ev had experience with in all dyspept and gastric troubles. I have been pra ticing 35 years, and thus you will s this is saying much for a remedy. I action is slow, but I deem this all t better. D. W. TICE, M. D.

Troy, Mo.

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Potassium Sulphate	1.17191
Sodium Sulphate	64 04838
Sodium Hyposulphate	.11663
Magnesium Carbonate	.50153
Calcium Carbonate	5.08299
Strotium Carbonate	.13413
Iron (ferrous) Carbonate	.39715
Lithium Chloride	.01309
Sodium Chloride	11.68057
Sodium Bromide traces	
Sodium Iodide	.00122
Sodium Arsenate	.00198
Calcium Fluoride	.09564
Calcium Phosphate	.01168
Magnesium Nitrate	.49512
Alumina	.03499
Silicic Acid	.67648
Carbon dioxide, combined with Mono-Carbonates	2.68321
	120.92846

	GRAINS
Sulphuric Acid (SO3)	56.94360
Sulphurous Acid (SO2)	.08514
Chlorine (Cl)	7.07743
Iodine (I)	.00105
Bromine (Br)-trace.	
Flourine (Fl)	.04665
Phosphoric Acid (P2O5)	.00875
Nitric Acid (NO3)	.41406
Carbonic Acid (CO2)	6.60976
Lime (CaO)	13.43569
Strontia (SrO)	.51319
Magnesia (MgO)	2.77594
Iron (FeO)	.24669
Potash (K2O)	.63333
Soda (Na2O)	34.17817
Lithium (Li)	.00234
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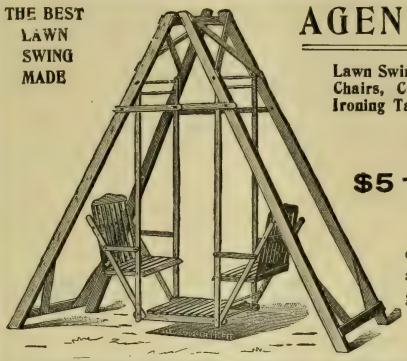

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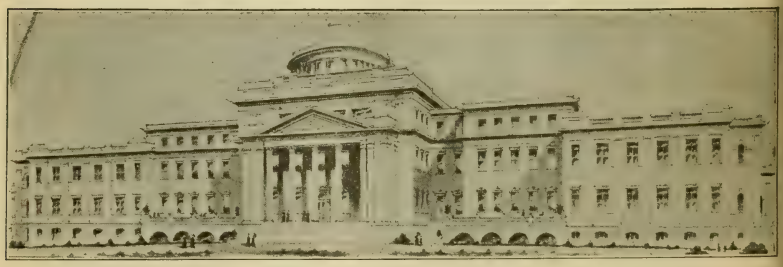

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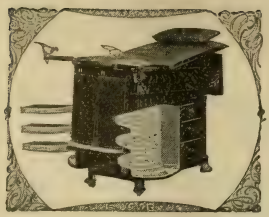

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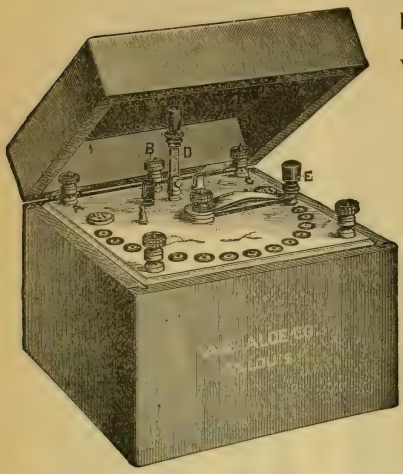

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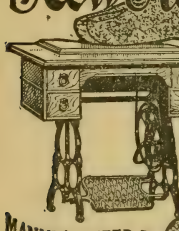

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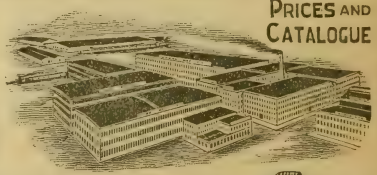

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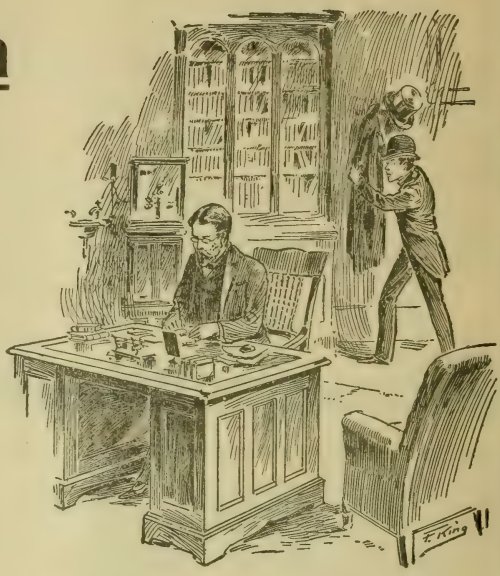

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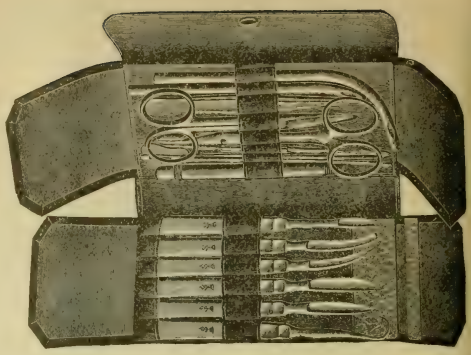

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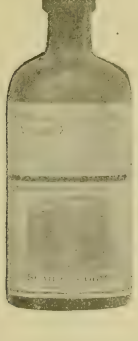

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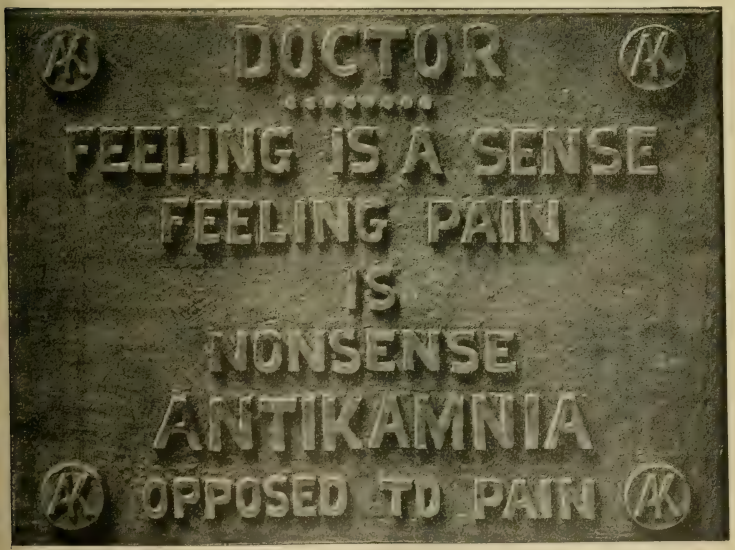

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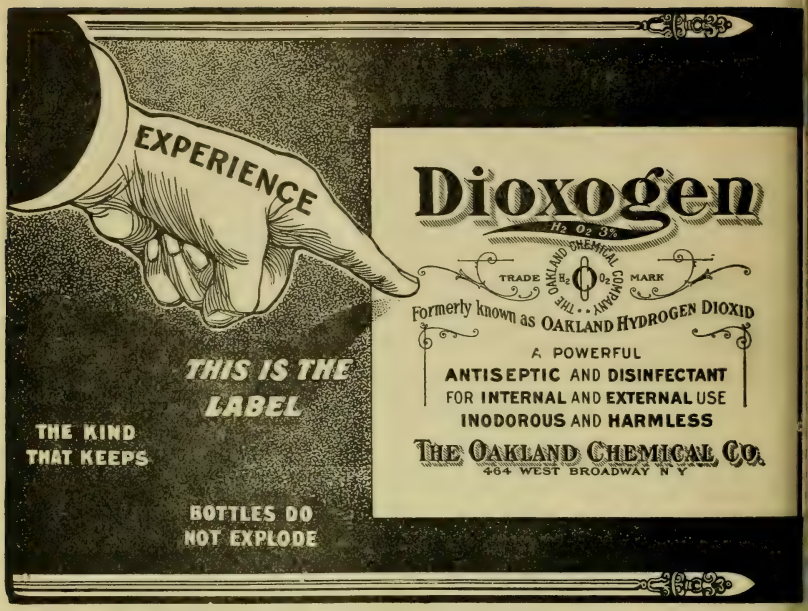

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EDITORIAL.

ACETOZONE IN TREATMENT OF TYPHOID FEVER.

Acetozone (benzoly-acetyl-peroxide) was introduced to the medical profession by Profs. Frederick G. Novey and Paul C. Freer, of the University of Michigan, on account of its marked germicidal power. When acetozone is brought in contact with water, hydrolization takes place with the resultant formation of the very active antiseptic chemical compounds, acetyl hydrogen and benzoyl hydrogen peroxides. A solution of these peroxides was found to destroy all pathological bacteriæ, and Profs. Novy and Freer suggested that it would prove beneficial in prophyoxis and treatment of such infectious diseases as typhoid fever, cholera and dysentery.

Acetozone is a definite, though somewhat unstable crystalline compound which at 98 degrees F., is put on the market mixed with equal parts of inert powder to give it pharmaceutical stability. While it may be administered in 3 to 5 grain capsules three times daily mixed with equal parts of dycopodium, glycyrrhizc, or sugar of milk, still it is best given in doses of 4 to 6 ounces of solution of 20 grains to quart of pure water. Fresh solution should be prepared each day. It is claimed that its saturated solution may be given in large quantities without danger.

As to its employment in the treatment of typhoid fever, an experiment is cited in which crystals of acetozone were added to water containing one million typhoid bacilli to the cubic centi-

meter and the water was made sterile in 15 minutes. While this may be true in the laboratory, no such germicidal experiences can be expected when this preparation is taken into the alimentary canal.

Dr. Eugene Wasdin, of the United States Marine Hospital service, in *Therapeutic Gazette* (May, 1902), and *American Medicine* (February, 1902), maintains that the normal cycle of an uncomplicated case of typhoid fever is 14 days; that the primary point of infection is the respiratory tract and that the bacillus of Eberth invades the general circulation from this primary colony in the bronchi. This theory as to the primary infection point does not harmonize with the many known epidemics which are directly traceable to infected water or milk supply. It is, perhaps, nearer correct to say that infection point may be in the bronchi, or alimentary canal singly or simultaneously. Dr. Wasdin maintains that in those cases where the 14-day cycle is prolonged to three or four weeks, there are developed secondary colonies in the intestine with absorption of toxines therefrom. Hence arises importance of using antispetics. In the twenty-seven cases detailed as treated with acetozone the majority were limited to fourteen days' duration, and in all the bowels were largely absent and there were no fatal cases. The treatment was as follows: On admission the bowels were thoroughly moved with calomel one grain, aloin one grain, guaiacol carbonate two grains. This was followed by daily administration of 1.500 to 2,000 cubic centimeters of 24-hour-old solution of acetozone. Some cases received acetozone in 5 grain capsules three times daily. Some received along with that by stomach inhalations of atomized solutions with view of influencing bacilli in bronchi. The first effect of the hyperoxides of the acetozone was marked increase in kidney secretion. This may have been partially due to large quantity of ingested water; same effect was observed, however, from capsules. Secondly, the stools gradually became odorless and plate cultures of dejecta, slow reduction of number of organisms to almost that of normal feces. Dr. Wasdin draws the following conclusions:

(1) That the peroxide is efficiently germicidal under conditions favoring its hydrolyzation; (2) that it is innocuous to man and animals, being readily secreted through the kidneys as hippuric acid; (3) that in the treatment of typhoid fever and other bacillary diseases it is directly applicable to destroy the primary colony, provided it can be brought into contact with it; (4) that its special application in typhoid fever enables us to obviate intestinal infection and absorptive toxemia therefrom, thus favoring the formation of protective anti-bodies, and limiting, in many cases, the disease to its normal cycle; (5) that in those cases of inefficient reaction in typhoid fever its use tends to make the patient much less uncomfortable, thereby offering better results from appropriate serum therapy.

PHYSICIANS IN PROPORTION TO POPULATION.

The estimated number of physicions per 100,000 of population in European countries is thus given by a contemporary and offers some food for reflection:

"In England there are 63 physicians to 100,000 inhabitants; in Ireland, 53; in Switzerland, 52; in Belgium, 45; in France, 31; in Germany, 30; in Nor-

way, 26; in Holland, 21; in Austria, 20; in Italy, 18; in Sweden, 14; and in Russia, 8."

It will be seen that up to a certain point, the ratio of medical men to the population is an index to the relative advancement and intelligence of the nation as a whole, and also of its material prosperity. Thus England stands at the head of the list, while Russia has only 8 physicians to the 100,000 of population. The relatively low position of Germany we are inclined to attribute mainly to the poverty of certain sections of that country. This way of viewing the above quoted statistics is apparently flattering to our own country, since the ratio is much greater in the United States than in any of those previously mentioned.

It will hardly do, however, to push our deductions too far, for while it is true that we occupy a front position in the march of civilization and the general uplifting of mankind, and that we can with reason boast of our wealth, we are supplied with doctors, as in many other things, beyond the present demand. We have the exubriant productiveness of youth. If it were possible to add to the number of our medical men the great army of quacks and charlatants and the equally numerous pseudo-scientists of all stripes, it would seem that Americans are a much put upon people.

We also lead the world in the number of female physicians—6,000 of a possible 8,000 living in America. The balance are distributed somewhat as follows: Seven hundred in Russia, which is surprising; 400 in England; 35 in France, and 20 in Italy. There are also a good many in the foreign missionary fields.

NOTHING NEW UNDER THE SUN.

Prof. Lannelongue recently stated at a meeting of the Academie des Sciences, Paris, that an Egyptian mummy of the eleventh dynasty, dating back about 5,000 years, showed the results of an operation for appendicitis.

This will prove a surprise to the class of people who are always ironically asking the cause of this new fangled disease of appendicitis, which our forefathers knew nothing of, and therefore must never have had. The fact that not only the affection but the operation itself is as old as an Egyptian mummy, will supply the element of antiquity heretofore lacking, and which seems necessary to command the respect of some people. This, of course, taking for granted that the learned professor, who has been peering into the secrets of 5,000 years ago, has not been misled by appearances, or by his own zeal. At any rate we are justified for the present in assuming that the builders of the pyramids divided upon the questions of medical and surgical treatment, of early and late operation and whether or not, come what might, the operator should always secure the appendix.

Apomorphine in Hysteria.

Faucher (*Bull. Med. de Quebec*) strongly recommends apomorphine for hysterical attacks. He injects 1-10 gr., and claims that in this way he is able to cut short hysterical attacks and hystero-epilepsy. The vomiting and subsequent depression have a sedative effect on the nervous system. The great advantage of the treatment is the saving in time. The doctor can leave the house within fifteen minutes. Faucher has also used this method in cases of true epilepsy. The paper contains several illustrative cases.

The Carolina Medical Journal

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ORIGINAL COMMUNICATIONS.

Some of the Recent Remedial Measures.*

By Dr. W. W. McKenzie, Salisbury, N. C.

During the past few years the general advance in therapeutice has been more marked than in previous years and a very considerable number of new remedies or new remedial measures other than drugs have been introduced, and after due trial have been found worthy of professional confidence. It is needless to say that many others have been brought before the profession, and, after careful trial, have been relegated to the list of failures or continue to be used by a very limited number of practitioners who have not yet determined their exact status.

One of the newer therapeutic measures which offers considerable advantage in the treatment of grave and pressing complications is the hypodermic injection of sterilized salt solution containing gelatin, for the purpose of arresting hemorrhages which cannot be arrested by means of direct application or compression. This method, which is supposed to act by very materially increasing the coagulability of the blood has been employed to so large extent in France that it is there recognized as being a wise procedure, and in our own experience with it in this country, it has given results which justify a continuance of its employment. It is hardly necessary to point out that these injections must be given under the strictest antiseptic precautions, both in regard to the preparation of the skin of the patient, the solution itself, and the needle and syringe with which it is administered.

The injections have apparently given good results in forming the clots in the

*Read before the North Carolina Medical Society at its Wrightsville meeting, June, 1902.

aneurismal sacs, in arresting pulmonary hemorrhages, and in controlling others more constant, but less active loss of blood.

The injection commonly employed consists of 18 grains of ordinary gelatin and 18 grains of sodium chloride in two ounces of distilled water, which should be administered with an antitoxin syringe divided into two doses of an ounce each. When aneurism is to be treated by this method, an injection every day or every other day is sufficient. "In more pressing cases where the gelatin is to be used but for a short time, two injections may be given in the same twenty-four hours." (Hare.)

Urotropin, which is a compound containing formaldehyde, which on being absorbed, is decomposed so that the formaldehyde is set free in the urine exercising its powerful antiseptic influence. As a result it has proven itself of very great value in the treatment of cytiter associated with phosphatic and alkaline urine, not only exercising a useful, permanent influence, but often giving relief after a very few doses have been taken. It has also been found by Richardson to be a valuable drug for the purpose of preventing the spread of infection by typhoid fever germs, since it so disinfects the urine of typhoid patients that the bacillus of Eberth is destroyed. I have also found it of great value in the last stages of gonnorrhœe. The usual dose is from 8 to 10 grains dissolved in half tumblerful of water and taken three times a day.

Taka-Diastase. — Another remedy which is surely obtaining a very definite therapeutic rank is taka-diastase, the ferment obtained by the process of Takamine, of Japan, and which is used for the treatment of those very common forms of dyspepsia occurring from faulty digestion of the starches.

This substance given in capsules alone or combined with nuxvomica or arsenic will certainly almost always give immense amount of relief.

I have found it of great value in the vomiting of pregnancy if given in five grain doses in capsules before eating, it surely will prevent to a notable degree the nausea and vomiting which is so annoying to the pregnant patient.

Heroin.—This is a new morphine derivation. This preparation has been introduced into medicine for the purpose of allaying cough, and is substituted for codine. Its action in relieving cough and dyspnoea is prompt; and its ready solubility renders it peculiarly suited for hypodermic administration, especially where immediate results are required. In therapeutic doses there is no disturbance of the gastric functions. Its action on the intestines seem to be a slightly constipating one. The drug is well borne in both the young and the old. As an anodyne in painful affections, it ranks much below either morphine or codine. The dose is from 1-10 to 1-3 of a grain. The incompatibilities to its use internally are alkaline and apomorphine. The results which heroin has achieved promises for it a permanent place in therapeutics.

Holocaine.—This remedy finds its chief usefulness in ophthalmologic surgery as a local anesthetic. Special journals, devoted to the eye, have recently contained many articles in which reports have been made as to the exact sphere of usefulness of this new synthetic substance. They claim that it promises certain advantages over cocaine in that it does not cause mydriasis, and, therefore, does not tend to increase tension. It does not affect ac-

commodations. It produces a greater degree of anesthesia of the iris than does cocaine. It relieves severe and painful inflammation which resists cocaine, and, unless swallowed or injected subcutaneously, does not produce poisoning. It is strongly antiseptic in its action, has no roughening influences on cornea. On the other hand it does not tend to control hemorrhage as does cocaine, since it does not cause primary contraction of the blood vessels. It may be employed one-half to one per cent. solution.

Acetozone (*Benzyl-Acetyl Huperoxide.*)—Since we recognize that the cause of typhoid fever is a germ (the bacillus of Eberth) and that the symptoms are due to the absorption of the toxic products of that organism, we are better able to treat the disease more scientifically, hence, the first step is to eliminate the toxine from the system and destroy them. So we first simply move the bowels by grain doses of calomel and soda every hour until from 4 to 6 grains have been taken, and then give some antiseptic. Acetozone is highly recommended by good authorities in the treatment of typhoid fever. Dr. Eugene Wasdin, surgeon United States Marine Hospital service, of Buffalo, N. Y., reports twenty-seven cases of typhoid fever treated by him in which he used acetozone, and all cases recovered. He advances the theory "that the primary germ colony of this disease cannot be considered as taking place in the intestinal canal, but that the weight of evidence shows it to be normally an invasion of the respiratory tract; that the bacillus of Eberth invades the general circulation from this primary colony (typhoid sepsis in practically all diagnosed cases; that from the blood current it may give rise to all of the well-known terminal expressions, such as the infection of the intestinal tract, the gall-bladder, the urinary bladder, the serous membrane, bone marrow, etc." His treatment of these cases consists in administering grain doses of calomel combined with one gain of aloin and two grains of guiacol carbonate every four hours until intestinal canal was well flushed; also patient was given from 1,500 to 2,000 cubic centimeters of the twenty-four-hour-old solution of acetozone daily; the diet was milk diluted with the acetozone solution. In addition to the acetozone then administered by the mouth, the effort was made to reach the colonial area in the lung) by means of forced inspiration of the atomized solution, but owing to the paresis of this area and the well known difficulty of atomizing the deeper structure, it is not known that the applications were of great benefit. In some cases the acetozone was given in capsules, five grain, in sugar of milk three times daily. To meet high temperature cold sponge baths and at times the full tub. He notes that the first influence of this drug is the increased secretion of the kidneys, second influence is the very pronounced decrease of the odor of the typhoid stools which soon become odorless, and at the same time the flora of the intestines quickly become diminished, plate culture of given quantities of the dijesta showing comparatively few germs to the normal. The intestinal complications are most frequently the source of the greatest danger in typhoid fever, and are the cause of the major part of the mortality of the disease and of many of the prolonged cases, therefore, if we have in this remedy an agent capable of at least partially sterilizing the intestinal canal,

thus reducing the possibility of gaseous fermentations with bowel distentions and its concomitants, hemorrhage and perforation, a great advance in treatment has been gained. But we accomplish at the same time the destruction of the secondary infection of the canal by the typhoid organism, thereby averting further toxaemia by absorption from the canal.

Mixed infection is made materially less probable. The germicide is, therefore, to be directed against both the primary colony in the respiratory tract and the secondary expression in the elimentary canal, and he has used the solution by hypodermocysis with benefit.

Diphtheria Antitoxine.—It is hardly necessary at this time of day to insist on the unquestionable value of the diphtheria antitoxine, the efficacy whereof has been confined by statistics from all parts of the world. I think we are satisfied that this antitoxine is a specific, but the question is asked "if it is a specific, who does it not cure all cases?" The reason, I think, is (1) it is not used early enough, the strepococcis having been given time to develop and produce their violent effects. Hilbert found that when a mixed culture of diphtheria bacilli and streptococci is inoculated into animals afterwards treated with antitoxine, the latter recovers from the diphtheria but succumbs to the streptococcus infection, but when the antitoxine is used early the streptococcis infection is averted. (2) It is not used energetically enough, too small quantities or at too rare intervals being administered. (3) There is a proportion of patients who are susceptible to the disease that antitoxine cannot cure them, just as there are patients suffering from malaria who cannot be cured by quinine, or sypilitics who are not cured by mercurials and iodides. The dose varies with the severity of the case and the time administered. The earlier the remedy is used the more favorable are the results obtained. In mild cases where the serum is administered within twenty-four hours of the onset of the disease the initial dose should be not less than 1,500 units and should be repeated every eight hours until most marked and decided improvement results. But in severe cases where the serum is administered in thirty-six hours of the onset of the disease 2,500 to 3,000 units should be used and repeated every seven or eight hours. In the extreme cases, especially in croup and where the treatment is not begun until after 36 hours, the dose should be from 3,000 to 5,000 units. In these cases ,as in others, the injection should be repeated every eight hours until recovery is assured. Dose for immunization is 500 to 1,000 units.

My experience has been limited to fifteen cases, three of which was true diphtheria and the remaining twelve diphtheretic laryngitis (membranous croup); of these the three true cases recovered, and three of the laryngeal type died; two of the latter tracheotomy was performed and one intubation. Of the nine recoveries, only two required intubation, antitoxine was sufficient in the other seven. In all of these cases the antitoxine made by Parke, Davis & Co., was used, which is always reliable, I think.

Silva Vitellin—Iron Vitellin—Tannin Vitellin.—During the past eight years Doctors Albert C. Barnes and Herman Hille, of Philadelphia, Pa., have been engaged constantly in original research work in chemistry and experimental therapeutice in America

and at the University of Wurzburg, Berlin and Heidleberg. Most of their work has been of a purely scientific character, but nevertheless interesting to the modern physician. They call the attention of the medical profession to four new synthetic compounds produced for the first time by themselves, which after extensive clinical tests in the United States and Europe, have proven to be of more than ordinary practical value in the treatment of disease.

They claim for their silver Vitellin a substitute for silver nitrate. It contains 30 per cent. of silver, twice the quantity of any silver proteid heretofore produced. The significance of this fact is apparent since the therapeutic value of a silver compound depends upon its silver content. They say "that silver vitellin does not precipitate albumen or sodium chloride, hence it differs from silver nitrate in that it has no coagulating effect upon mucus membrane and is not chemically changed by their secretion. A further advantage of silver vitellin over silver nitrate is that the action of the latter is confined to the surface of mucus membrane, whereas silver vitellin has an intensely penetrating action (without causticity or irritation) whereby the antiseptic effects of silver are exerted deep into submucous structures, when, as is well known, gonococci and other pathogenic organisms find and maintain a lodgement in spite of energetic measures to eradicate them. Clinical results indicate that silver vitellin will replace the other silver compounds in the treatment of gonorrhoe and in diseases of the eye, nose and throat. In 40 cases of gonorrhoe treated by Dr. H. M. Christian at the University Hospital of Pennsylvania, cessation of discharge was obtained in fifteen cases within ten days, although the strength of solution employed was as high as 5 per cent. In no instance did it produce irritation, but was of distinct value from beginning in allaying inflammation, diminishing discharge, reducing the number of gonoracci and shortening the duration of the disease. Dr. Swinbuine, of New York, treated 66 cases of gonorrhoe at the Good Samaritan Dispensary. In 64 of these cases the unpleasant symptoms were done away with entirely; amount of discharge was markedly diminished from the start, the gonoroacci were reduced in number, and the course of the disease shortened.

Dr. Edward Martin, professor of Clinical Surgery, University of Pennsylvania, says that this silver compound is the best that he has ever used, and further says that it is remarkably effective and absolutely non-irritating.

Iron Vitellin.—This iron they claim differentiates itself from ferratin, iron peptonates, etc., by the fact that it is not decomposed in the stomach. Digestion of this compound with an artificial gastric juice for four hours at body temperature, fails to split off even a trace of iron, hence it cannot be astringent or irritating to the gastric mucous membrane as are the other compounds.

A summary of the result obtained thus far indicates that the advantage of iron vitellin over Blaud's mass, iron peptonate, etc., consists of its more easy assimulation, its freedom from digestive disturbance, and its greater general beneficial influence upon the sign and subjective symptoms of blood improvement.

Tannin Vitellin.—They claim this to be an intestinal antiseptic and astringent.

Clinicaus have availed themselve

of the use of this drug in cases of typhoid fever because it sterilizes the urine to the extent of complete disappearance of typhoid bacilli from that fluid.

The essential feature of this compound, they claim, is that it so combines a non-toxic antiseptic and astringent that the compound is influenced by the gastric juice, but is gradually split up into its compounds as it passes downward through the intestines; hence, it cannot disturb the stomach and it exercises antiseptic and astringent properties in the lower part of the intestinal canal.

This remedy has proven of marked value in a large series of cases of acute catarrhal enteritis, chronic diarrhœa due to lesions in both the small and large intestines and in infantile diarrhœa it produced prompt cessation of bowel movement and relief from symptoms of inflammation. The field of application of this compound is typhoid fever and inflammatory diseases of the intestines associated with diarrhœa and the symptoms of antointoxications dependent upon intestinal putrefaction.

These gentlemen have also discovered a new dry surgical dressing, which is pink, impalpable, odorless, tasteless and insoluble powder containing 45 per cent. of bismuth, 15 per cent. of iodine and 3 per cent. of formaldehyde in definite chemic combinations. The effect of this compound on wounds is antiseptic, astringent, dessicating and granulative producing. These gentlemen are reliable and I think that they have done a great and good work for the medical profession as well as the sufferers of the disease in which these remedies are indicated, and I think these compounds are entitled to official recognition in the *Pharmacopocia.*

Creosote.*

By J. B. Wright, M. D., Granite Fall, N. C.

I shall make no attempt to follow the custom usually pursued by my predecessors. The chairman of each section usually explore new fields, and it has been especially so in the section of materia medica and therapeutics. I shall write on the drug that I feel that I can give the most information to the busy practitioner. I think creosote is that drug, and it is a drug that is being badly neglected by the profession, and, not without a just cause, and to remedy this cause shall be one of my feeble efforts in this paper. Perhaps almost every practitioner has experimented with creosote more or less, and yet very few average practitioners use it. The cause of non-success with creosote depends upon one of two things: either injudicious administration or the administration of an inferior article, the latter to my mind is the paramount cause of non-success of every doctor who uses it. Creosote like every other drug, is manufactured by almost every manufacturing chemist, and as we ordinarily find it, it is not what we should administer to our patients. I shall as briefly as possible analyze creosote chemically. The ordinary preparations found among druggists are composed of first, Phenols which belong to the carbolic acid type with a chemical formula of C_6, H_5, OH. Second, cresols with a chemical formula of C_7, H_8, O. Third, Phlorols C_8, H_{20}. Fourth, Guaiacol C_7, H_8, O_2, and fifth, Cresol $C_8, H_{10}, _2$.

At first glance one will note that the second and fourth or Cresol and Guaiacol have a very similar formula, yet

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the first is objectionable because toxic and the latter is non-toxic and of great therapeutic value, and again the third and fifth or Phlorol and Creosol are alike in their chemical construction, yet Phlorol is toxic and Creosol is non-toxic. Out of the five constituents of commercial creosote, we only want two, the other three being very objectional.

Repeating.—First the Phenols are a group of organic compounds of which carbolic acid is the type and are very poisonous. Second, Cresol is of the phenol type and consists of three varieties: viz., Para-cresol, Meta-cresol, and ortho-cresol which are isomeric, that is, composed of the same elements in the same proportion, but are chemically and physiologically different. Third, Phlorols are oily compounds and are very irritating and without any therapeutic value. Fourth, Guaiacols are oily liquids of decided therapeutic value and are very often substituted in the place of creosote. Fifth, Creosols are colorless, oily liquids of an agreeable odor and burning taste, and of very great therapeutic value. Pure beech-wood creosote should be composed of Guaiacol 60 per cent and Creosol 40 per cent. These other impurities should be eliminated. Now the question arises how are we to know that we have a pure article, and who can we rely upon, I shall try to explain. Rely upon no one as to the purity of creosote, but test every sample yourself before prescribing it. I shall give two or three very simple tests that any doctor can apply and that every doctor should apply before giving a sample of creosote. The pure creosote is distinguished from the impure or that containing Phenols and Carbolic acid by the following tests: First, pure creosote forms a transparent fluid with collodium, whereas impure creosote and carbolic acid gives with about two-thirds of their volume of collodium a gelatinous mass. Second, pure creosote is nearly insoluble in glycerine, and carbolic acid is soluble in all proportions in glycerine. Third, alcohol and ferric-chloride added to pure creosote produce a green solution which is turned brown by adding water, whereas alcohol and ferric chloride added to carbolic acid makes a brown solution, which is turned blue by the addition of water. These three tests are very simple and can be carried out by any doctor. From the above analysis of creosote any doctor can readily see the great importance of being very careful, and prudent in selecting a pure preparation of creosote. We cannot be too cautious about the preparation we prescribe, and if we wish success we must be positive that our patients are getting the pure article or we will certainly fail in our anticipated results, and of course come to the conclusion that creosote is not of the therapeutic value some few would try to make us believe it to be. I feel that I cannot put too much stress on the great necessity of seeking out the purest samples and administering only the preparation free from impurities. I find in my very limited experience that the white label creosote manufactured by T. Morson & Son can be given in larger doses and with better results than any preparation I ever used. They claim it is made by a double distillation of tar from pine wood instead of beech wood tar. Yet, on account of the constant inquiry for beech-wood creosote they do supply both kinds, but they are entirely different and should not be confounded. The white label creosote contains less of the objectionable substances found in many samples of creosote. Such as Phenols, Cresols and

Phlorols. This fact accounts for patients being able to take larger doses with safety.

Dose.—The dose is very important as no one rule can be laid down that will suit all cases. The dose should be given to suit the particular patient and it depends upon what the drug is being given for. Of course, the dose should not be the same in every case, hence here hinges the success of one doctor and the downfall of another. I want to put great emphasis upon the important fact that a large dose is not always the best, and the necessity of a close vigilance and regulating the dose to suit each patient's constitution. The dose of creosote depends upon upon what it is given for: example, one or two minims is sufficient to allay vomiting, three to five drops is sufficient in cases of diarrhœa and intestinal disorders, or for an intestinal antiseptic, and ten to fifteen minims is usually large enough dose in pneumonia and bronchitis, but we usually have to give thirty to one hundred drops in cases of phthisis pulmonalis. I never gave over 80 drops of beech wood creosote, but have given Morson's in hundred-drop doses three times a day with very gratifying results.

Mode of Administration.—Creosote may be administered internally, subcutaneously, externally, by inhalations, and it has been thrown down into the lungs combined with a hydrocarbon oil. Of these several modes of administration giving it internally has proven in my experience to be the best. When a pure article is used there are no objections to giving it "per orem." I am skeptical about the statements I have seen as to creosote's use subcutaneously. A few doses may may be given in that way, but it could not be long continued. It produces a swollen, reddened, tender area from one-half to an inch in size around the point of injection, which lasts for two or three days. This terminates in an induration of longer duration. This renders impracticable the continued use of it in this way, and its continued use is necessary in most cases, but there is nothing of special advantage to be gained by its hypodermic use, for when taken internally it is readily absorbed into the system unchanged and goes to the blood as pure creosote. I have never practiced throwing creosote directly into the lungs and cannot see any advantage to be gained by it, in fact it could not be administered in this way so as to reach and penetrate a tubercle in the alveoli. If it does not reach and penetrate the tubercles of the alveoli, it is immediately thrown off by the cilli of the bronchi, and could only be of advantage in a local way in tubercular bronchitis and tubercular laryngitis. There are so many other better local antiseptics that are not so disagreeable. If it is to be given to destroy pus cocci in the bronchi, it would be better to give some less disagreeable and better local antiseptic. I do not claim any decided therapeutic properties for pure creosote by local application. It has a very great preserving power, and it is claimed to have, to some extent, a local anæsthetic action. I do not believe pure creosote has any anæsthetic properties. It is the impure article that has this effect, and it is due to the carbolic acid it contains. Creosote is an excellent antiseptic, and is absorbed into the blood unchanged so we have the blood carrying to every part of the body an antiseptic and preserving fluid. This creosote-charged blood goes to every organ of the body, destroying germs or rendering the soil

less fertile for them as it goes. Creosote is eliminated principally by the lungs, kidneys and skin. It is a largely excreted by the lungs, hence its special value as a pulmonary antiseptic. All the impure blood goes to the lungs to be purified before being circulated over the body. The lungs are therefore more thoroughly saturated with the creosote than any other one viscus of the body. The pulmonic circulation is small compared with the systemic circulation, and as all the blood of the body is forced through it, the lungs are thoroughly bathed with this creosote-charged blood to a greater degree than any other viscus of the body. Really, the entire lung tissue is thoroughly permeated with the drug, both through the circulation and by excretion, hence the fallacy of giving it by throwing it down into the lungs or by subcutaneous injections, for it reaches every minute portion of the lung when given internally. I believe in giving creosote until my patient is saturated with the drug. In tuberculosis pulmonalis to reap permanent results it must be continued a long time after every symptom of the disease has disappeared. I would suggest that it be kept up at least twelve months after the patient is apparently cured. It will not impair digestion, but aid it if a pure sample be administered. I have been using creosote regularly for three years, and since I begun to test each sample and to use only the preparations that prove to be pure, I have not had a single case to fail to take any amount I gave, without any complaint, such as burning the stomach or causing indigestion. On the contrary, it invariably aids digestion, increases the flow of the gastric juice, prevents fermentation and increases the appetite. I usually give it in capsules along with terraline or compound syrup of hyphophosphites. Sometimes I give it alone having patient to take it about the middle of each meal, so it does not enter the stomach while empty and the meals serve as a vehicle to dilute it. I usually begin with fifteen or twenty drops and increase one drop a day until forty or fifty drops three times a day is reached. I let them take that amount for a few weeks, then if they do not seem to be still saturated I have them to increase at the rate of three or more drops per day until sixty or seventy drops three times a day is reached. I rarely ever have a patient that demands over fifty drops three times a day. There are some few cases that demand more, but a great many are given more when it is not actually necessary. Large doses of creosote are sometimes a necessity, but I do not think we should give a hundred drops in every case of tuberculosis that comes under our care, simply because some other doctor has given that amount and had success. As stated above, it is actually a necessity in some cases, but I believe them to be rare.

Uses.—The uses of creosote are legion, and yet it is not used as frequent and as varied as it should be. It can be given to advantage in small doses in the following diseases, vomiting, diarrhœa and especially spring diarrhœa caused from fermentation, cholera, sea sickness, etc. It is used as a gargle to salivation and in ointments for ringworm and various cutaneous affections and in malignant and indolent ulcers but its greatest service is in pulmonary diseases. It might almost be called a specific in pulmonary tuberculosis

its early stages. I have used it with decided advantage and very gratifying results in pneumonia. It certainly is of service in acute pneumonia. I have used it in five cases during the past winter. I gave them twelve drops in a capsule every four or five hours day and night. I found it would relieve the cough when present, render breathing less labored, slightly lower the temperature and lessen the virulence of the pneumococci, and thus decrease the auto-intoxication, hence there was less depression causing a less demand for stimulation and in this way decrease the danger of death. One case I think worth mentioning, as I gave him nothing but creosote and tincture of aconite: Negro, aged 30 years, occupation, stone layer, fell in water on Saturday. I was called to see him the following Tuesday night; found him with a temperature of 103 F., rapid, bounding pulse, respiration accelerated and complaining of a catch in his side; he had a hacking cough with some bloody expectoration. I gave him seven grains of calomel and soda and five grains of acetanelid and salol; saw him next morning, bowels had acted freely, but he was no better and had not rested all night. I gave him twelve drops of creosote and three of tincture of aconite every four hours, saw him next day much improved. I kept him on same treatment for three days, when I left off the aconite. He improved steadily from the beginning, his expectoration cleared up, cough steadily improved, pulse was better and temperature gradually went off. He sat up on the seventh day. He had a rapid and uneventful recovery. My limited experience with creosote in pneumonia has been very gratifying.

Uric Acid Excess.*

By D. J. Hill, M. D., Lexington, N. C.

Many diseases, not to mention a multitude of symptoms, of heretofore unknown pathology which come before the general practitioner for treatment are now recognized as some one of the manifold manifestations of uric acid excess. While I am not prepared to go to the extent that Haig does in attributing a very large proportion of chronic diseases to this one cause, it must be admitted that the condition often gives rise to many distressing symptoms, and in some cases occasions incurable organic lesions. Most writers on this subject teach that there is perhaps never an excessive formation of uric acid at a time and that its accumulation in the blood and body at any time is due to retention or failure of excretion. If we accept this as true (and we must, after studying the extended scientific researches of the most distinguished authors), we are forced to the belief that indigestion, especially of the intestinal variety, has a wonderful influence in checking the elimination of uric acid or else rendering pathologically active that which is otherwise latent in the system, or in some way interfering with that normal ratio of the uric acid to the urates (1 to 35 I believe as given by Haig) which is so essential to health and happiness.

Dr. W. Gilman Thompson asserts that "the dyspepsia of lithaemia is in part a concervative process, checking digestion and absorption, whereas predigested foods are much more promptly conveyed to the overburdened liver or overloded blood." This can apply only

*Read before the North Carolina State Medical Society, June 10, 1902.

to those cases in which nitrogenous material is taken in excess of the individual needs; and certainly no rational physician would force nature to save his patient from one pathological condition, by interposing another, when the remedy is so simple as that of withholding the protieds.

Indigestion plays a greater role as a causative factor in the production of those symptoms attributed to excess of uric acid than is generally believed. Many express the opinion that indigestion is a result of excess of uric acid. Clearly to my mind they have the "cart before the horse," it is a cause rather than a result of the trouble. Either may aggravate the other, but the indigestion is the primary cause. The lithæmic manifestation so often attributed to disturbance of the nervous system are primarily due to interference with normal digestion; or rather, the nervous strain, worry, or anxiety from any cause, gives rise to indigestion, and that in turn to gout or rheumatism. Do not understand me to mean that imperfect digestion of ordinary products in those not predisposed to lithæmia would give rise to such trouble, but it is the breaking down of some special nitrogenous substance that occasions the distressing symptoms. We have all noted attacks of gout, rheumatism, migraine, hay asthma, or some one of the protein phases of disease resulting from excess of uric acid, coming on immediately after an attack of acute indigestion whether the result of improper diet, nervous strain, anxiety or other cause. A patron of ours has been in the habit of eating strawberries every spring, and at once suffers indigestion, diarrhœa, dysentery, and rheumatism, coming on as certainly as the berries are eaten, and in such regular order that it cannot mean other than cause and effect.

Another man, who has suffered greatly from rheumatism for the past ten years comes occasionally to our office and asks for some of the "same medicine for rheumatism." If he comes early in the attack before there is too much involvement of the joints, we give him a brisk purge, and follow with dermatol gr. x, 3 times a day after eating; no anti-rheumatic medicine at all as you see, but the attack is aborted; he experiences prompt and perfect relief. For the past two years we have kept him supplied with dermatol, which by the way is one of the very best remedies for intestinal indigestion and fermentation, and which he takes whenever the pains in his joints remind him that he needs it, with the result that he almost never loses any time from business. Of all the causes of lithæmia we are taught to believe that improper diet is the most fruitful. But the laboring classes live largely on meats and leguminous vegetables—just the diet most productive of uric acid; yet these people are singularly free from lithæmia. Why is this? They take plenty of out-door exercise, they have no nervous strain, worry or anxiety—nothing to interfere with normal digestion and hence they are free from this train of distressing symptoms.

Perfect digestion of protied substances makes urates; imperfect digestion of the same material makes uric acid. This, in a general way. Of course excessive amount of such food in any case will almost surely, sooner or later give rise to disease. In seeking the relief of lithæmia patients, diet and other hygienic measures demand our first attention. The diet should be carefully regulated, and this consists essentially in eschewing all nitrogen-

ous or albuminous articles such as meats, eggs, etc., along with the leguminous vegetables, which are known to increase the tendency to excess of uric acid. This should be done in no half-hearted way, but they should be excluded entirely from the dietary of those whose condition is such as to admit it. Avoid tea and coffee; tea is worse than coffee.

Take starch foods and sweets sparingly. Give milk and butter, the succulent vegetables and fruit, remembering that acid fruits, strawberries, acid oranges and lemons sometimes give trouble. Give water in abundance, before meals. Keep the skin clean, and the skin and kidneys active; promote digestion; prevent fermentation in the stomach and bowels; keep the bowels active; and to accomplish this I give cascara evacuant x to xv gts. in water before meals and gr. x demators after meals when there is fermentative dyspepsia. Supplement the action of the cascara by the use of Mag. Sulph. every morning before breakfast when needed. Keep the urine alkaline or neutral by the use of the potash salt, the acetate, citrate, or bicarbonate, which ever is most acceptable to the stomach. This is supposed to lessen tendency to heart complications, in addition to aiding in the elimination of uric acid. To alleviate the pains, and at the same time hasten the elimination of uric acid, Salicylate of soda is one of the most reliable remedies. To those who bear it well, as much as 80 grains or 100 grains a day should be given, in divided doses, and it will be found that an opiate is rarely necessary. If, however, the pain be excessive, morphia hypodermically, or tr. opii diol., or liq. dov. in appropriate doses by the mouth may be given.

I have attempted only to refer in brief to some of the more interesting phases of this subject, hoping by so doing to evoke discussion. If I have succeeded my object is accomplished.

So-Called Dyspepsia.

By CHARLES ADRIEN JULIAN, M. D., Thomasville, N. C.

In preparing this article, I feel that I am performing a task of failures and an apology is required of me for attempting a subject, the elucidation of which would require a collection of stolen things that would baffle the ingenuity of the most commendable plagiarist. The title is more to "tickle the itch of the ears than to satisfy the appetite of the soul." I will confine myself to an effort to satirize the subject, depict the condition of gluttony, encourage continency, abstinacy and temperance, and review what I consider the most rational treatment.

It is always essential before the delineation of any subject to have an exact idea of what it indicates, but this is confounded with so many terms that the interpretation would disturb the equilibrium of a man whose stomach was neither acid nor alkaline. There has been as much confusion and empiricism in the treatment as in the name. If I could clear away whatever mistiness may have accumulated with time about them and present to your mental vision fresh truths clothed in naturalness, if I could in any degree succeed, I would feel that I was answering a purpose that has long lain unperformed. It is a matter of general experience that disorder of the digestive organs is frequently occasioned by defects in the quality of the food. Hard and coarse foods overtask the digestive powers, irritate the mucus surface of the stomach and bowels and leads to torpor. The

chemical composition of a food is not always a safe criterian for estimating its value. Its digestibility must always be taken into consideration, as the physical characters may render it liable to disorder digestion. In tracing out the causation of disease we find in not a few instances that excess is the disturbing element instead of quality.

The man who eats greedily, of course the pleasure of indulgence is the sole object and there are people who have a voracious desire for food, who yet are but atrophies and living skeletons, who devour not that they may digest and grow, but gratify and please themselves. Then comes the sin of gluttony, the same food when partaken of moderately is wholesome that becomes dangerous when used to excess. I have been tempted in some instances to supply the cud and endow them with the genuine faculty of rumination. The man who wrote that he had a wife, three children and six cows to feed doubtless took the same view. We must have sufficient food to carry on the bodily functions, and maintain life —the appropriation of good food lays up heat and energy in the time of need —and makes brawn and brain. The hygiene of the alimentary system is faulty in nine cases out of ten, and the stomach is bloated and distended by excessive eating and drinking, hence dilatation the factor which predominates in dyspepsia. No food should be introduced into the stomach when any part of a preceding meal is there, nor should the meal be hurried or the thorough mastication be neglected, for the very finest division of food is indispensable for its digestion. Imperfectly masticated food is not only a mechanical irritant, but remains unnecessarily long in the stomach and undergoes fermentation with all manner of attending disagreeable symptoms, epigastric uneasiness, fullness, pain, eructation of fou gases, etc. The ingesta that remain in the stomach is like water that stagnates in the pond or reservoir, soon becomes foul. When food remains in the stomach five hours after ingestion, it i pathological, and if it remains six hour anomalous fermentation occurs an after the seventh hour the alimentar residue will undergo exclusively aci or putrid fermentation. In this putri condition the mucous membrane be comes corroded, nervous symptoms ap pear—there are manifestations of dys pnœa—cutaneous and renal diseas and breaking sensations in the muscle and joints. In these fermentative o putrefactive alterations minute organ isms grow and multiply, taking up fro the living animal material for their sus tenance, thus robbing their host of tha upon which his tissue must subsist an they in turn produce various excretor substances which are extremely poi onous to the animal organism whic entertains them. Stop and consider th importance of the digestive tube. E erything except oxygen is introduce into the organism through it and b fore introducing the food it must elab orate it. Poor thing, how badly som people abuse and over-tax it. Outsid of the underlying relationship with di eased states of other parts of the bod it is seldom that the stomach is at fau but the man who is stuffing it. Th stomach sounds the alarm, but the poo ignorant fool who feels a little tende ness about his epigastrium, who is victim of gastralgia, who is ematiat and weak and sucks in wind and belch it out like a graduated cribber, who skin is livid and dry, extremities co and disposition morbid, goes to h

medical adviser and gets him to prescribe an appetizer and stuffs it still, producing in its empetuous current, such an assemblage of morbid feeling that life often becomes a wearisome burden and its endurance beyond the power of reason to sustain. To observe temperance in diet and drink are the most essential correctives. Only those things which are directed to the purposes of nourishment and growth, and the support of the bodily functions should be provided. I would like to pay my respects to the subject of improperly prepared food for about one hour and a quarter. I would like to picture the ten by twelve biscuits, that have a crust above and a crust below and a pound of dough between, the ham that is served in a deep soup toureen with a quart of a-la-grease, the seeds, the rinds and husks that give you those griping pains and are thrown off as they are swallowed. This is the picture of the ignorant, but oh, for those a-la-mode. The chafing dish party presided over by a woman who learned her art at a cooking school, who can make you a Welch rarebit or a fincasseed omelet that will keep you company into the wee hours of the morning; those mayonaised salads and meat croquets that will cause you to see the spirit of your great grand sire, the frozen puddings, the deviled eggs and all the other develed dishes that destroy the capacity of the stomach to digest and the integrity of the tongue to pronounce their names. We must attribute a great many other things in the pathogenesis, but that would lead to a very scientific paper on remote as well as direct causes.

The introduction of the stomach tube and a chemical analysis of the stomach contents are the only means of determining the different forms of this disease and a correct understanding of this is necessary for successful treatment. The treatment of a functional ailment or a structural alteration certainly requires a cursory knowledge at least of the anatomical alteration. In assolution or a total acidity of fifty-two (52) certaining the secretory condition of the stomach the gastric contents are best examined after a test meal. I had in mind the clinical examination of cases before you, the introduction of the tube and the chemical analysis of the stomach contents and a request for prescriptions for the cases I found it impossible to bring the cases here. The tests I use are as follows: Total acidity. Take ten c.c. of filtered stomach contents and an equal part of neutral water, add two drops Phenonphthalien and titrate with a decinorman N. A. O. H. solution until a ruby red color appears, which indicates the contents have been neutralized.

Calculation: If for ten c.c. of stomach contents it requires 5.2 c.c. of decinormal soda solution, to neutralize one hundred c.c. of stomach contents, it will require as many times 5.2 c.c. of decinormal solution as ten is contained in one hundred, or ten times 5.2 c.c. 52 c.c. of decinormal points. In like manner I test for free Hcl., using Dimethyl as an indicator.

Next test for all acids, and acid salts, (except the acid combined in the process of digestion) by using alizarine as an indicator and to find the combined acid you must subtract the amount of all the acids and acid salts from the total acidity. Fermentative or fatty acids equals the difference between the free Hcl. and all the acids except the combined period. Test for rennet by adding five drops of the stomach contents to some fresh milk and keep it temper-

ature of body for fifteen minutes. Test for Pepsin by adding cooked egg to stomach contents in warm place two hours. Pepsin is never absent if Hcl. is present.

In ordinary cases where no chemical analysis is made, I insist upon a rigid dietary and a thorough system of purgation, but where an anlysis is made I follow the following scheme:

Of course the treatment must be based on the history of the case as well as from a scientific investigation. Five out of every ten physicians combine Pepsin with every prescription regardless of indication. There are firms who perceive the spirit of the times and present to us incongruous monstrosities in the way of quick and ready combinations. Treatment is constantly changing its character according to the style of those ambitious minds that guide our opinions and fill our fancy. Some wizard is always scattering his enchantments, trying to seize us with every prevailing idea and subduing us to his own purpose with new combinations that arise for a moment to reflect any light and then sink again into a dark eternity.

Ergoapiol (Smith) in Diseases of the Female.

By Chas H. Shepard, M. D., Physician to Lincoln Hospital, Durham, N.ºC.

A deep and general interest is attached to all knowledge pertaining to the treatment of common diseases of the uterus, to which women are subject, and a vast literature is the outcome of this profound and focussed interest. We live to-day in an age of transition—a period of change. A great many of the former theories in medicine are fast passing away. New medicines are made, achieve a short-lived success, and then pass on to obscurity. This is true most especially in medicines for gynecological diseases. Of the newer remedies it is hard indeed to get one that may be depended upon for long. They soon lose their reputation and potency and are relegated to the past.

We know that all diseases of the womb have not the same etiology nor the same pathology, therefore they should not all have the same treatment. Far too often the general practitioner groups all these diseases together as one and gives the routine treatment. It is not enough to give anodyne medicines for dysmenorrhea no more than it is sufficient to treat alike all forms of dysmenorrhea.

The operation of curettement has a most important place in these conditions, but like other remedial agencies, it has its limitation. When we curette the uterus we rid it of a pathologically obnoxious lining membrane, and afford a normal membrane the opportunity to be formed.

The healthy woman with normal genitalia menstruates regularly and painlessly once a month from puberty to the "turn" of life, except that this regularity is interrupted by pregnancy and afterwards by lactation. Any departure from this rule constitutes an abnormality. Amenorrhea is less frequently met with than dysmenorrhea and irregular menstruation. The present age of transition has brought forth what is popularly known as the "new woman," and she has brought with her new ideas and practices which in very many cases retard growth and the natural process necessary for perfect health. For leaving the old landmarks, she has to suffer.

The most generally useful medicine in the conditions of amenorrhea, dysmenorrhea, irregular, scanty and fetid

menstruation, in my judgment, is a preparation of the Martin S. Smith Co., of New York, known as Ergoapiol (Smith). In the female ward of the Lincoln Hospital, Durham, N. C., I have used this medicine very extensively, and it has not only never failed to benefit and cure, but know no remedy with which I could replace it were I deprived of it. Its efficacy may be tested by any physician who properly tries it. I mention a few cases with short description of each, in which it has given the most signal benefit in my hands.

Ergoapiol (Smith) is put up as a small capsule, and is made up of a special form of apiol which is of the very highest quality. Combined with this are some other most valuable hemagogues and they all go to make a fine preparation. It seems to be a scientific pharmaceutical preparation, nontoxic, tonic, as well as emmenagogue. What I have to say of this preparation is based entirely upon clinical experience, and I feel safe in saying that it will bear a clinical test whenever properly administered.

REPORT OF CASES.

Case I.

Mrs. F. was admitted to hospital September 15, 1901; married; no children, though she had been married four years. Had not menstruated for seven years. Womb had been curetted several times; suffered from leucorrhea; pains in right and left iliac regions continuous. Examination showed a very small os, but generative organs were otherwise found to be normal. Another curettement failed to bring on the menses. I then prescribed Ergoapiol (Smith) to be taken one globule three times a day, and afterwards increase to one globule four times a day. After seven days of this treatment she complained of a general feeling of stiffness in her limbs, gaping and a feeling of malaise. The following morning she found to her delightful surprise that she was menstruating for the first time in seven years. At that time the flow was somewhat scanty, but the treatment was continued through three periods. Each succeeding period was more nearly normal than the one that preceded it. Now her functions are regular and I know no reason why she may not become pregnant.

Case II.

Mrs. S. complained of a continuous, dull, dragging pain, situated in the region of the iliac fossa of the right side. Menstruation irregular, scanty, fetid. Married six years; had never been pregnant. Excessive leucorrhea, though otherwise she was perfectly normal. Her weight was 140 pounds. Her condition, and the suffering, both physical and mental, which it occasioned her, was rapidly undermining her health. She was becoming emaciated, appetite of no consequence, general weakness. She considered her condition "hopeless." Cardiac weakness, of which she was a victim, contra-indicated curettement—which usually cures "whites" and allows the formation of a healthy lining membrane. Ergoapiol (Smith) was prescribed for her, one capsule three times a day. In conjunction with this I gave tonic medicines. After six weeks' use of this remedy, the woman said she was "feeling so good" that she did not need any further treatment. She had increased in weight and her appetite had become all she could wish. The menstrual flow was increased, and now, five periods having elapsed from the time treatment was instituted, her monthly flow has failed to appear. She does not expect its return for some time—supposing herself pregnant.

CASE III.

Miss S. suffered severe pain each month, beginning a day before the flow came on. The flow was a thick, clotted mass, consisting of membrane and the menstrual blood matted together. She had suffered from puberty, and the suffering became more intense as the years passed on. She was 19 years of age, stout, of healthy parentage. Admitted to Lincoln Hospital January 15, 1902. She declined an operation. I afterwards prescribed Ergoapiol (Smith) and have continued it for one month. Her next menstruation was free and easy; painless and regular. I doubt not that keeping up this treatment up to another period she will be entirely rid of the hitherto troublesome condition.

CASE IV.

Miss W. Tubercular history. Menstruation very irregular, sometimes three, sometimes five weeks between periods; very painful; scanty. I prescribed Ergoapiol (Smith) one capsule four times a day, beginning one week before the menstrual period and continued a week after the period. As a result of this treatment the patient feels a great deal better in her general health. Her monthly flow has been rendered painless and increased in quantity. Ergoapiol has a tonic action upon the muscular fibres of the womb. Its effect is not transitory, but lasting. This superior preparation is decidedly tonic.

CASE V.

Mrs. D. A victim of endometritis. Pain continuous between periods and is aggravated at periods. Leuchorrea was very pronounced; pains in the back; "hot flushes;" vertigo, headache. Patient would not allow an operation; highly sensitive. Several preparations were tried, but none gave relief until Ergoapiol (Smith) was used. It has entirely relieved the patient, and she is now loudly singing its praises. In this case treatment was kept up for ten weeks.

Ergoapiol has never failed in my hands. It is not possible that it can cure obstructive dysmenorrhea, but with that exception it is indicated in all the other diseases of the womb where a tonic and seditive action is the requirement.

CASE VI.

Mrs. D., widow; aged 33; had three children; youngest 10 years of age. She had suffered all her menstrual life severe pains in the pelvis at each period; had to keep in bed a week or more each month; paroxysms of pain were followed by a flow of the "whites;" no anemia; womb found to be flabby and relaxed; pains extended down thighs posteriorly. Had been treated for many years by various physicians of note, but had received only temporary benefit.

Ergoapiol (Smith) was given her one capsule three times a day, and increased at the time of the flow to four a day. After three months of this treatment her menstrual function became regular, and being entirely well now she feels that life, after all, is worth living.

I could prolong this list indefinitely with records of cases that have been entirely relieved of these conditions and I shall be pleased to furnish any information desired as to Erogoapiol (Smith) and its use.

Summer Diarrhœas of Children and Their Treatment.

By M. A. AUERBACH, PH. G., M. D., New York City, Medical Inspector, Department of Health.

The importance of these demands separate consideration. Three forms more or less distinct, can be recognized

viz., acute dyspeptic diarrhœa, cholera infantum, and acute entero-colitis.

Acute Dyspeptic Diarrhoea.—This disease is chiefly due to errors in diet, which do not necessarily consist in the substitution of unnatural foods for the mother's milk. The mother's milk may be altered in quality by emotional causes, by improper food and improper hygeine. Or it may be caused by over-frequent nursing. More often, however, it is caused by the ingestion of unnatural foods.

There are also pre-disposing influences which facilitate the action of the exciting causes. These are, especially dentition and the etreme heat of summer.

The prognosis of the aforesaid disease among the better classes is commonly favorable, but among the weak, puny and half-starved children of our lower east side, large numbers perish, especially during the summer months.

The old time treatment in these cases was a primary purge, calcined magnesia, or castor oil. After the purge bismuth sub-nitrate or prepared chalk was given. Since the introduction of Glyco-Thymoline (Kress) the above mentioned methods have been cast aside. A very good and effective prescription which has given me most splendid results in these kind of cases, in conjunction with a carefully restricted diet, is:

℞ Bismuth sub-nitrate..... dr. i
Tr. opii deoderatum..... m. x
Glyco-thymoline..... oz. ii
Aqua rosarum Ad Q. S ..... oz. iv
Misce et.
Sig. Dr. 1 every 3 hrs.
(For a child one year of age.)

Cholera infantum, a variety of acute catarrhal enteritis of intense severity, corresponding in symptoms and course to cholera morbus in the adult, but much more serious in termination.

Prognosis in these cases is at best not very favorable, although recovery is not impossible.

Treatment of these cases is of quite a different nature from those above mentioned. In the first place the fever must be combated and I know of no better method than a bath containing some Glyco-Thymoline, at about 80 degrees F., reduced by adding small pieces of ice to 70 or 65 degrees. Next pain, to reduce pain 100th of a grain of morphine sulphate can be administered to a child of one year. Stimulation with Strychnia hypodermically, iced champagne to prevent vomiting, brandy, whiskey and other stimulants.

One of the best methods for irrigating the large intestines is by introducing a small, soft catheter through the rectum and injecting into the bowel about a pint to a pint and a half of warm water containing about 25 per cent. of Glyco-Thymoline. This I find removes and prevents the re-accumulation of the fermentative as well as the putrefactive products of the bowel. Should however, the hyperpyrexia continue the douche may be given at a lower temperature. During convalescence, great care must be taken in the feeding of the patient.

Acute Entero-Colitis is an affection of inflammatory nature more severe than dyspeptic enteritis, chiefly of the ileum and colon, affecting especially the lymph follicles. This, like the preceding, is a disease of the hot months of summer, and the period of teething, especially. It is produced by the same causes as dyspeptic diarrhœa. It is most frequent during the ages of 6 and 18 months. It likewise may be a termination of dyspeptic diarrhœa, or of cholera infantum.

Treatment.—The general surroundings and hygiene necessarily play an im-

portant part. The medical treatment, however, is somewhat different. Anodynes are most imperatively demanded because there is greater suffering, and depletion may be needed in the beginning, by salines, though good judgment is required because the child's strength must be watched. The colon should be flushed with a solution of Glyco-Thymoline, having a strength of 25 per cent. This I find answers admirably in these cases. The solution may be made with iced water. The coming teeth should likewise be watched and the gums be scarified whenever required.

I will supplement my remarks by adding a few of the many cases treated with Glyco-Thymoline and leave results speak for themselves.

CASE NO. I.

M. K., aged 8 months, male, was taken with severe vomiting and colicky pains at night. The vomita contained lumps of coagulated milk. The stools were very offensive and recurred at intervals of 20 minutes. I left a prescription for Glyco-Thymoline 2 oz., Bismuth sub-nitrate one drachm, Rose water enough to make 4 oz. I called the next morning and found but little improvement in my patient, and at once flushed out the bowel with a 25 per cent. aqueous solution of Glyco-Thymoline and continued the prescription given the night previous. This treatment was continued for three days, the patient steadily improving during that time. I recommended that the child be taken away from the city, which was done. I heard later from the parents that the child had not had a relapse, but made a speedy recovery.

CASE NO. II.

Mary C., aged 7½ months, was brought to my office, her little knees drawn up, a look of anguish on her face which was pale and drawn with eyes protruding. She had a number of watery discharges from the bowels, incessant vomiting, a temperature of 103½, a rapid and feeble heart. A further examination of this poor little tot was unnecessary. Anodynes were at once administered to soothe the pain. I washed out the bowels with a 40 per cent. solution of Glyco-Thymoline and administered the same in a 50 per cent. solution with peppermint water internally in doses of one teaspoonful repeated every two hours. The results in this case far exceeded my expectations. The child made a slow, but successful recovery.

CASE NO. III.

L. P., male child, aged 16 months; was called to check the diarrhœa, which was of a serious character, having a tinge of blood. The vomiting was not of a severe nature, the only alarming symptoms the child showed were the intestinal ones. Three separate washings of the child's colon were made at intervals of six hours. The child's food was restricted to barley water. This case, like the one preceding, made a perfect and speedy recovery.

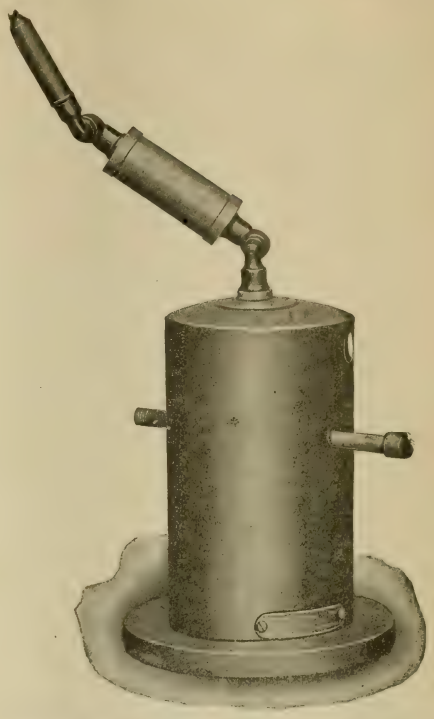
CASE NO. IV.

R. A., a little tot of the east side, aged 13 months, brought up in one of the dark and dingy rooms of a tenement house; this poor little one was suffering for five days before my attention was called to the case. I found it in an emaciated condition, unable to move a limb, the bowel movements were frequent and watery; the little one was on the point of collapse; strychnia was administered hypodermically to stimulate the heart, after which diluted brandy was given every half

hour. The colon was irrigated with 24 oz. of a 50 per cent. aqueous solution of Glyco-Thymoline. I had the child under my observation for two and one-half weeks and with proper food and fresh air, the child made a good recovery.

CASE NO. V.

M. M., a boy baby, seven months of age, teething, and causing all sorts of trouble for its parents, who were well-to-do. Was summoned to the house early one morning, found the little one vomiting quantities of curdled milk, and movements having a decidedly fetid odor. I tried most everything in this case and received but small relief by the use of Glyco-Theymoline. Upon careful investigation, I found that the teeth were causing the trouble; the gums were then lanced, and the child's diet restricted; that is, the breast feedings were given at three hour intervals and only lasting five minutes at a time. Glyco-Thymoline was kept up with perseverance and good nursing our little one soon got well.



Electric Heater Used by Dr. Hopkins in Treating Deafness.

Superheated Compressed Air for Deafness.

CASE: John L., aged 53, had nasal catarrh for fifteen years and gradually increasing deafness for ten years. Diagnosis: Chronic cataarhal otitis media with sclerosis and displacement of the tympanum, ankylosis of the ossicles, slight dilation of the Eustachian tube, and some labyrinthine involvement. The diagnosis was confirmed by two colleagues of reputation as aurists, before treatment was instituted. Regular systematic treatment, continued for two years before this experiment was made, had scarcely stayed the progress of the disease.

Treatment: The ear was thoroughly cleansed with alcohol for several days before treatment was instituted. The patient was then seated in a comfortable chair, the ear examined and found perfectly clean. Narrow strips of dry gauze were packed into the ear and a large pad of dry gauze placed over the ear. A current of air was then sent into the canal at a temperature which gradually attained 400 degrees F.

The temperature was easily borne,

it increased gradually, until a high point was reached; the only discomfort attending the treatment arising from a severe headache which followed it, but which was promptly relieved by a dose of codein.

Following the hot air treatment, the Eustachian tube was always inflated with a warm stimulating vapor from a globe nebulizer, vibratory massage with the nebulizer completing the treatment.

The patient was not allowed to leave the office for a half hour after treatment and the ear was tightly packed with warm cotton before he went out.

Treatments were continued on alternate days for three months, at the end of which time he could hear the watch tick distinctly at thirty-four inches, and surprised his friends by invariably replying to their whispered references to him.

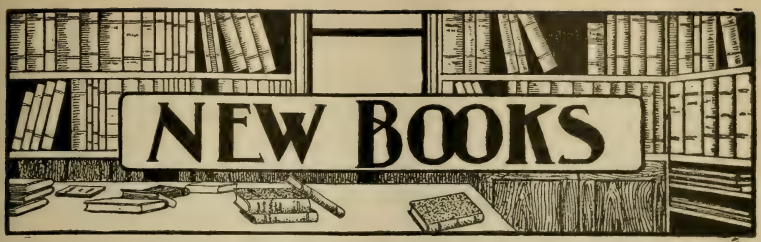
The right ear was then similarly treated, and in ten weeks an equally good result was secured.

Examination showed that the ears were normal in appearance. The patient was discharged January 6, 1897, and careful tests made at frequent intervals since have shown no tendency to recurrence.

As to the philosophy of such a cure by this agency little can be said at this time, but it seems certain that the intense heat stimulates the circulation through the blood supply on the posterior side of the manubrium, causing absorption of the articular deposits; removing atrophy and relieving the rigidity of the tensor tympani. The ossicles lie so near the surface that they receive the full benefit of heat applied to the tympanum, and adhesions between portions of the ossicular chain and the adjoining bony walls of the middle ear are readily removed.—*Extract from Annals of Otology, Rhinology and Laryngology, Feb. 1902.*

The Transmission and Prevention of Yellow Fever.

Lieut.-Col. V. Havard, among other things, says that the hibernation of the mosquito which transmits yellow fever (Stegomyia fasciata), the hibernation of the lavæ in ice, and the wonderful vitality of the eggs which resist the drought of tropical climates as well as the long winters of northern countries, render their extermination almost impossible. There is more hope in the attempt to prevent the mosquito from becoming infected. Unless it has sucked the blood of a yellow-fever patient, it is as harmless as any other mosquito; therefore one of the measures most clearly indicated is to prevent mosquitoes from having access to patients by protecting the latter with window-screens and mosquito bars. Any patient thus protected during the infectious stage (first four days), is entirely innocuous. Fumigation is always necessary as soon as the patient can leave his room, in order to destroy any mosquitoes which may have bitten him and may still be lingering in the house. We now know that it is impossible for any house to be "infected" with yellow fever, except in the sense that it may harbor infected mosquitoes. Fumigation with either sulphur fumes, formaldehyde gas, or the smoke of pyrethrum powder will be all the disinfection required. The disappearance of yellow fever from Havana is due to the incessant battle of the chief sanitary officer and assistants against the Stegomyia fasciata, and the use of effective screens around the patient.—*The Texas Courier-Record of Medicine.*



International Clinics, A Quarterly of Clinical Lectures and Especially Prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Pædiatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose and Throat and Other Topics of Interest to Students and Practitioners by Leading Members of the Medical Profession Throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, etc. Volume II Twelfth Series, 1902. Philadelphia. J. B. Lippincott Co., 1902. Cloth, $2.00.

Volume II, of the 12th series, International Clinics, is of surprising interest. The contributors are men of great prominence in their special lines, and the subjects have been selected with universal care. The section on Therapeutics contains lectures by Prof. Lipine on Diabetes Mellitus; on Treatment of Bladder and Rectal Troubles in Nervous Diseases, by L. R. Muller; on Acute Usethritis, by Prof. Ernest Finger; Simple Ulcer of Stomach, by Albert Robin; and two cases of immediate death following spinal injection of cocaine are reported by F. Legnen. Dr. R. Romme has an interesting and valuable contribution on the Gersney method of treating depressions in the skin resulting from loss of tissues from any cause, by the injection of valeline. This method has quite a wide field of usefulness, not only for cosmetic purposes, but in many diseases and defects due to loss of substance or relaxation of the tissues. The technique is simple and the results reported have been highly satisfactory.

The section of medicine contains two first-class articles upon Cinbosis of the Liver; one upon Pancreatic Cyst, by P L. Daniel, of England; Pachymeningitis Hemorragica as a cause of Dunlord's Death, is considered by Prof. A. Pick. The remaining articles of this section are all full of interest and value to the practitioner.

The division of surgery is also replete with reports and lectures from men of international fame. Resection of the Cerricle Sympathetic, by Prof. T. Jonneser, will prove interesting reading.

Drs. W. B. Coley and N. Senn each have clinical lectures upon a variety of subjects of importance to the general practitioner as well as the specialist. The special article by Dr. J. B. Walker on Treatment of Acute Appendicitis will also merit careful reading.

Under the head of Special Articles is also embraced An Outline of the Organization and Work of the Medical Department of the United States Army, by E. L. Munson; Some Notes Upon the Management of a Modern Private Hospital, by H. A. Kelly, M. D., and Functions of the Digestive Glands, by Prof. Borissof. This volume contains a Biographical Sketch of Dr. Jno. B.

Murphy, of Chicago, and a well selected list of prescriptions.

NERVOUS AND MENTAL DISEASES. By Archibald Church, M. D., Professor of Nervous and Mental Diseases and Medical Jurisprudence in the Northwestern Medical School (the Chicago Medical College), Chicago; Late Professor of Neurology in the Chicago Poloclynic; Neurologist to St. Luke's, Wesley and Chicago Hospitals; Consulting Neurologist to the Home for Destitute Crippled Children, Chicago, etc.; and Frederic Peterson, M. D., President of the State Commission in Lunacy, New York; Clinical Lecturer on Psychiatry, Columbia University; Chief of Clinic Department of Nervous and Mental Diseases, Columbia University; Ex-President of the New York Neurological Society; President of the Board of Managers of the Craig Colony of Epileptics. With 322 Illustrations. Third Edition, Thoroughly Revised. W. B. Saunders, Philadelphia and London, 1901.

This book is really, as stated in the preface, two books written by separate authors and bound together. Nervous and mental diseases are so closely allied that this arrangement is natural and not at all incongruous. Even a hasty glance through the book shows the work to be one of the highest order by men who are acknowledged authorities and who have the happy and rare faculty of stating their views with great force and clearness; while a more careful reading reveals the fact that the authors justify their claim to have written a text-book for students and general practitioner, nor need the alienist of the specialist type pass this work by, for to the reviewer's mind it is thoroughly up-to-date and contains only the most scientifically correct statements; in fact, it is easily one of the best books ever published on nervous and mental diseases.

To those of us who do a general practice the book is especially acceptable, since most of us have but a very imperfect knowledge of nervous and mental disases. We have possibly a general idea of these subjects and are fairly familiar with many of the grosser forms of these diseases, but anything like a clear-cut, accurate, discriminating knowledge of the various morbid lesions coming under these two heads is almost beyond the ambition of the general practitioner. Drs. Church and Peterson's book will do much toward putting a knowledge of nervous and mental diseases within the reach of the general practitioner, since each subject is treated so clearly and concisely as to be readily understood and withal pleasant reading.

Nervous and mental diseases touch the work of the general practitioner at so many points that it is highly important that he keep himself posted along these lines. In the work under review we find not only the rarer diseases, such as syringomyelia, the trophoneuroses and family tremor, but most excellent chapters on the more common diseases, as neuresthenia, meningitis and the infectious neuroses, including tetanus and chorea. Taken as a whole, the book is a valuable addition to any medical library.

Only one or two individual statements can be noticed. In speaking of the course of tubercular meningitis Dr. Church gives the usual course of the disease, but does not mention those occasional cases in which the final stage of

coma and paralysis are prolonged over a period of from two to three months. At least two such cases have come under the observation of this writer, and are worthy of mention because of the very fact that cases of the kind are not mentioned in the text-books. Dr. Church emphasizes the fact that hydrophobia is in civilized countries a preventable disease, since in North Germany where the muzzling of dogs is rigidly enforced hpdrophobia is almost unknown. It is noticed that this author uses the word "obstipation" for the old-fashioned and expressive term "constipation." This can not be called an error, but it is a departure from custom that is altogether unnecessary. J. W. L.

PRACTICAL DIETETICS, with special reference to Diet in Disease. By W. Gilman Thompson, M. D., Professor of Medicine in the Cornell University Medical College in New York City; visiting Physician to the Presbyterian and Bellevue Hospitals. Second Edition, enlarged and thoroughly revised. D. Appleton & Co., New York, 1902.

This is an admirable work of some 800 pages, illustrated where necessary to a clever understanding of the text, and upon a subject about which the average practitioner is very deficient. Indeed it is a matter of some difficulty, as the author remarks, in his preface, to get any exact information regarding diet in the ordinary works on medicine.

Dr. Thompson has given us a most excellent guide in his work upon this subject and one which every doctor should appreciate. It is eminently practical and does not waste time on the ultra-scientific phases of the question. The appropriate diet for each disease is carefully and concisely considered and the writer has availed himself of the best authorities upon this subject including the admirable researches upon foods of our own government.

We cannot too highly commend this work on Dietetics, as filling a certain vacant space in the average medical library. The physical features of the work are of the best.

A PRACTICAL TREATISE ON NERVOUS EXHAUSTION (Neurasthenia), Its Symptoms, Nature, Sequences, Treatment. By George M. Beard, A. M., M. D., Fellow of the New York Academy of Medicine; of the New York Academy of Sciences; Vice-President of the American Academy of Medicine; Member of the American Neurological Association; of the Aemerican Medical Association; the New York Neurological Society, etc. Edited, with Notes and Additions, by A. D. Rockwell, A. M., M. D., Professor of Electro Therapeutics in the New York Post Graduate Medical School and Hospital; Fellow of the New York Academy; Member of the American Neurological Association; of the New York Neurological Society, etc. Fourth Edition, Enlarged. New York: E. B. Treat & Company, 241-243 West 23d Street, 1901. $2.00 net.

This fourth and enlarged edition of Beard's classical investigations on "Nervous Exhaustion" (neurasthenia) is fully in keeping with the high standard of those which have preceded it. It still remains the leading treatise in English on this subject.

Besides frequent notes and additions, the editor has enlarged and rewritten the chapter on pathological fa-

tigue and its relation to the neuron under the heading, "General Considerations Relative to the Etiology, Pathology and Treatment of Neurasthenia." N.

A Text-Book Upon the Pathogenic Bacteria for Students of Medicine and Physicians. By Joseph McFarland, M. D., Professor of Pathology in the Medico-Chirurgical College, etc. With 142 illustrations. Third Edition, Revised and Enlarged. Price $3.25 net. Philadelphia and London: W. B. Saunders & Co.

Three editions in four years tells certainly that the profession have found the book valuable. It is intended for students and practitioners of medicine, and care is exercised that no bounds are out-stepped. It does not attempt to deal with all known bacteria, but as its title implies, only the pathogenic bacteria are considered, and these in full. The revision and enlargement brings the work up to date with the advancements in this line which have taken place since the appearance of the prior edition. The text will readily commend itself to the physician and student of medicine for the clearness with which it is expressed.

The work is arranged in two parts—Part I., General Considerations, and Part II., Specific Diseases and Their Bacteria. In Part I. the biology of bacteria, infection, intoxication, and immunity and susceptibility are considered; the technique for cultivating and the recognition of bacteria, and the methods for animal experimentation are described.

Part II. is sub-divided into (*a*) The phlogistic diseases, acute and chronic inflammatory diseases; (*b*) the toxæmias; (*c*) the bacteremias, and (*d*) miscellaneous.

The work fully justifies its title, and the practitioner as well as the student will find it the most reliable and authoritative work on the pathogenic bacteria extant.

A Text-Book of Pathology. By Alfred Stengel, M. D., Physician to the Philadelphia Hospital; Clinical Professor of the Practice of Medicine in the Woman's Medical College of Pennsylvania, etc. Octavo, 848 pages, illustrated. Price, cloth, $4 net; half morocco, $5 net. Philadelphia and London: W. B. Saunders & Co.

This book is intended to supply the need of a practical modern text-book for students. The general practitioner, however, will find it an invaluable hand-book for ready reference, presenting a clear and sufficient outline of the modern theories and developments of the most important branch of medical science.

In this work the practical application of pathological facts to clinical medicine is considered more fully than is customary in works on pathology. While the subject of pathology is treated in the broadest way consistent with the size of the book, an effort has been made to present the subject from the point of view of the clinician. The general relations of bacteriology to pathology are discussed at considerable length, as the importance of these branches deserves. It will be found that the recent knowledge is fully considered, as well as the older and more widely known facts.

In the second part of the work the pathology of individual organisms and

tissues is treated systematically and quite freely under sub-headings that clearly indicate the subject matter of each page.

It is written in clear, concise language, and the arrangement is excellent, making it invaluable for the student and practitioner.

PROGRESSIVE MEDICINE, Vol. II., June, 1902. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth, 440 pages, 28 illustrations. Per volume, $2.50, by express prepaid to any address. Per annum, in four cloth-bound volumes, $10.00. Lea Brothers & Co., Publishers, Philadelphia and New York.

The June issue of Progressive Medicine contains a series of valuable contributions on subjects of great importance to the general practitioner.

Dr. Wm. B. Coley considers the Surgery of the Abdomen, including Hernia. His article is full and thoroughly practical, illustrating the great field for surgical therapeutics in the treatment of many diseases of the digestive organs which have hitherto been considered as solely medical affections.

Dr. John G. Clark covers the field of Gynecology with great thoroughness. All the new operations and devices for the treatment of diseases of women, as well as advances in gynecological pathology and technique, are fully considered.

Dr. Alfred Stengel, in his article on the Diseases of the Blood and Ductless Glands, the Hemorrhagic and Metabolic Diseases, handles these difficult subjects in such a lucid and practical way as to make his contribution of value not only to the pathologist, but also to the physician, who, from the exigencies of his work, may find difficulty in keeping pace with the most recent advances, which have been especially remarkable in the study of the blood.

The article on Ophthalmology by Dr. Edward Jackson is marked by its author's characteristic facility of dealing with the subject in such a way as to be of value to the oculist and at the same time to meet the needs of the general practitioner.

As usual, illustrations are employed liberally wherever they can aid in the elucidation of the text. The abstracts are full and give the complete gist of the original papers from which they are taken. Their value is greatly enhanced by the comments of the various editors upon them.

MODERN MEDICINE. By Julius L. Salinger, M. D., and Frederick J. Kalteyer, M. D. Illustrated. Price, cloth, $4 net; sheep or half morocco, $5 net. Philadelphia and London: W. B. Saunders & Co.

This book strikes out on a new line, and has an excellent plan. It is an effort on the part of the authors to combine in one volume, as far as possible, the essentials of such specialties as physical diagnosis, bacteriology, examination of the gastric contents, the urine, the blood, the feces, etc., as applied to clinical medicine.

Symptomatology and semerology, physical diagnosis, clinical bacteriology, and laboratory methods in general, occupy about 170 pages.

Then are taken up in regular order

the infectious diseases ,150 pages; diseases of the circulation, of the respiratory organs, of the digestive tract, of the kidneys, constitutional diseases, diseases of the blood and of the ductless glands, of the nervous system and of the muscles; intoxication and sunstroke, with animal parasits, conclude the work. A very full index is another feature of the book.

This is a valuable work for the practitioner, because it brings to his immediate assistance such essentials as are useful at the bedside. It will prove a great help to the student as well.

ELEMENTS OF CLINICAL BACTERIOLOGY FOR PHYSICIANS AND STUDENTS. By Dr. Ernest Levy, Professor in the University of Strasburg, and Dr. Felix Klemperer, Private Docent in the University of Strasburg. Second Edition, Enlarged and Revised. Authorized Translation by Augustus A. Eshner, M. D., Professor of Chemical Medicine in the Philadelphi Polyclinic. 425 pages. Cloth binding. Price, $2.50 net. Philadelphia and London: W. B. Saunders & Co.

Dr. Eshner has rendered a valuable service to the profession in this country by his translation of this admirable work of clinical bacteriology, the authors of which are well and favorably known for their original work in both clinical medicine and bacteriology.

For the general practitioner who desires to have a working familiarity with the subject of bacterioloy and to possess a clear conception concerning the etiology of disease and resultant morbid processes, we are certain this publication will fill a long-felt want. Such a work is indispensable to any physician who wound make practical application of the best measures and methods of prophylaxis and treatment. Bacteriology has become more and more an indispensable aid to medical practice, and every practitioner, although he may not expect to be a trained bacteriologist, would do well to secure this work.

WARREN'S PATHOLOGY. Surgical Pathology and Therapeutics. By John Warren, M. D., Professor of Surgery in Harvard University, etc. Illustrated. Octavo, 833 pages. Philadelphia and London: W. B. Saunders & Co. Cloth, $6 net.

During the past ten years the teaching of surgery has been completely remodeled, and now no surgeon is competent in the best sense of the word unless he is at the same time a good bacteriologist, with a profound knowledge of pathological anatomy. It is the purpose of this book to furnish this instruction, and it carries out this intention fully. It is written in a scholarly and clear manner which carries conviction. The practical intention of the book is everywhere manifest, and the application of the bacteriological knowledge both prophylactic and therapeutic, is constantly impressed upon the reader.

To the student and to the practitioner its perusal will be of the greatest advantage. The book-making is of the very best.

KING EDWARD AND AMERICANS.—Mr. George W. Smalley in a personal article about King Edward VII., in *The Outlook* says:

We Americans have certain prejudices to get rid of before we can do justice to a king. But we ought to be just to this one, if only because he has

proved himself, as did his mother fore him, our friend. It has become commonplace to say so; and the commonplaceness of it is good proof of its uth. Americans of distinction who ve been aboad are so many witnesses the fact. They have been welcomed Marlboro' House, or at Homburg, at Sandringham; so have other mericans whose chief claim to disnction was their Americanism—hich itself for many years has been passport across many a social front-r in Endgland. The Queen's real gard for the United States and real ish for a good understanding beeen England and the United States s descended to her son. I will venre to add, delicate as the ground is to ead, that American women in London ve done much to foster this inherited d personal predisposition. From the rlies days of the American invasion, nen American women, of whom some e still living, began to enliven Lonn society and to light up certain aste spaces of social life, the Prince owed himself susceptible to these w enchantments. The influence thus ined has never been lost, nor the efct of it diminished. The Prince liked nericans. The Kink likes them. It ay not be amiss to note that two nerican women whose rank as wives British husbands would not entitle m to witness the Coronation in estminster Abbey will witness it as ests of the King. It certainly cannot amiss to note that the first Ambasdor with whom the Kink has dined is American Ambassador, Mr. Choate. d when the President appointed Mr. hitelaw Reid Special Ambassador the Coronation, the Kink first intited through official channels his asure in this act of our government, then sent a private message to say how glad he was that the Ambassador should be Mr. Reid, who had held the same post at the Queen's Jubilee.

Disease the Dread of War.

The ultimate statistics of the Boer war show, as in all previous wars, that sickness is a much greater danger than the chance of being killed in action. While 5,774 were killed in action and 2,018 died of wounds, the large number of 13,250 died of disease. This goes to prove that camp hygiene is still far from being a perfect science, and that gunpowder does not begin to compare with water contamination as an instrument of destruction. It may be a long time before there is another war, but if such should come, it is to be hoped that sanitary science shall still further have diminished the dangers of camp life.—*Med. Age.*

Expense of Nurse and in Hospital Recoverable.

The Supreme Court of Alabama says, in Montgomery Street Railway vs. Mason, a personal injury case brought by the latter party, that, if the attendance of a nurse was necessary while he was under treatment for his injuries received on account of the negligence of the street railway, it can not see why this was not as essentially an element of recoverable damage as the professional fees of the attending physician. So, too, it holds the necessary expense of a private ward in the hospital while undergoing treatment would constitute a proper element of recoverable damage.

Hydrogen Peroxide by softening the dried blood and serum is excellent for separating adherent dressings.

MEDICAL NEWS AND ITEMS.

Yellow fever has been epidemic for several months in Vera Cruz.

Paris has 87,655 trees in its streets, and each tree represents a cost to the city of $35.

Recently a Scotch bank-note was examined, and upon it were found 30,000 microbes in the space a sixpence would occupy.

The governor of Maryland has appointed the following commission on tuberculosis: Prof. William Osler, Lillian Welch, and W. F. Hines.

The Hawaiian Board of Health are on the lookout for a physician at the leper settlement on Molokai. The remuneration is $250 a month.

Mosquitoes are fond of anything blue. That is a scientific discovery that is furnishing an argument for changing the color of the United States army shirt.

During the past year there was only one death from hydrophobia in Prussia, owing to the strict enforcement of the regulations in regard to the muzzling of dogs.

In the future no one but a graduate of a regular school of medicine will be allowed to take any of the postgraduate courses to be given by the University of Pennsylvania Medical School.

Prof. Thilenius, of Breslau University, declares that in Central Europe there was a race of pigmies down to within 1,000 years of our own times. Healthy and well proportioned individuals of both sexes, measuring not mo than 4 feet 5 inches in height, were no means rare.—*Exchange.*

From the experiments which ha been conducted by Dr. Reid Hunt, Johns Hopkins Hospital, he conclu that wood alcohol, which has been t cause of so much blindness in the l two years, is itself a poison, and poisonous properties are not due to impurities present in it, as is oft claimed.

A Medical Hive.—One of the lar office buildings of Chicago is n (above the first floor) entirely gi up to the use of doctors and denti there being no less than 222 physici and thirty-six dentists under the roof. In this respect it probably sta as the most unique building anywh in the world.—*The Clinical Review.*

Typhoid Fever at Chickamaug Typhoid fever has again made its pearance at Camp Thomas, Chickam ga Park, Georgia, the first time s the epidemic among the soldiers du the Spanish-American war. The geon-General of the army has dire an investigation into the causes o outbreak to be undertaken by M Jefferson B. Kean, surgeon, and James Carroll, acting assistant surg

Judge Samuel Greene, of the C nal Court at Birmingham, Ala., ha cided that osteopathy is the practi medicine, and that any person enga in the same in Alabama can be f to procure a license for prac

medicine," which is: "Science which relates to the cure, prevention or alleviation of disease." The defendant claimed that osteopathy was not the practice of medicine, as no drugs were used.

The Vaccination Law Sustained.—A man living in Queens Borough recently applied to the Supreme Court for a mandamus to compel the Board of Education of Queens to admit his son into a public school without requiring him to be vaccinated. The justice in denying the writ said that the State law excluding children from the common schools until they are vaccinated is a health law within the power of the Legislature to pass, and was therefore constitutional and valid.

McKinley's Surgeons to Be Paid.—Secretary Cortelyou, at the request of President Roosevelt, has taken charge of the settlement of the surgeons' bills and other expenses incidental to the assassination of President McKinley last September. A lump appropriation of $45,000 to meet all claims was made by Congress, and it has been arranged that Mr. Cortelyou is to make requisitions upon the Treasury for the several amounts, and that these requisitions shall be honored without delay in the Auditor's office.

An Alaska Quarantine Station.—On account of the prevalence of smallpox at Nome, Alaska, and the danger of an epidemic under the rather crowded and unsanitary conditions prevailing in the mining camp, the government proposes to establish a marine hospital and detention camp at some distance from the town. The Secretary of the Treasury has asked the Interior Department to transfer the jurisdiction of Sledge Island, an island near Nome, from the Interior to the Treasury Department, for use as a quarantine station for smallpox patients. There is already a marine hospital station on the island, and as soon as jurisdiction is transferred temporary pavilions for smallpox cases will be erected.

The great demand for X-Ray and electrical apparatus, and most especially for "The Sorensen," can hardly be illustrated any better than by the fact that a new company has been incorporated in Ravenna, Ohio, with a capital stock of $25,000, for the manufacture of such goods. They have bought out the Grand Rapids and Toledo companies, as well as the old plant where the "Sorensen" was made in Ravenna, and they are now building a factory with about 25,000 square feet of floor space in addition, making it the largest factory in the world for the manufacture of such goods. The name of the new firm is "The Sorensen Manufacturing Co.," and they are pleased to see all of the customers of the three companies they are succeeding as well as all others, who may wish to get acquainted with their goods.

In Alabama it has been decided that osteopaths must take the regular examination of the State Board. The *Alabama Medical Journal,* July, 1902, publishes the following reference to the action of the courts: We publish in this issue of the *Journal* the decision handed down by the Supreme Court of Alabama, which is a very important case with reference to osteopathy. Commenting upon this decision, the *Journal of the American Medical Association* says: "By a decision of the Supreme Court, rendered June 28, in the case of Eugene Bragg vs. the State of Alabama, the decision of the lower court was af-

firmed. The decision affects several hundred men throughout the State, and will have the virtual effect of driving them from the State. Osteopaths are thus held to be practitioners of medicine, and must stand the examination as required by the laws of the State of Alabama for all persons entering the practice of medicine. This is another victory for the medical laws of Alabama and for the physicians who have labored for a higher medical education and reasonable qualifications to enter on the practice of medicine." The State of New York could afford to take heed of this wise action of Alabama, which is a model State in its medical organization and in the administration of its medcal laws.—*Buffalo Medical Journal.*

Cholera.—There has recently been an increase in the number of cholera cases in the various parts of the world where it now prevails. In Manila, where it had been gradually diminishing and hopes were entertained that the outbreak was at an end, the number of cases suddenly increased to seventy-eight on July 24th, the largest since the outbreak. It was feared that the city water was infected, but an analysis showed that it was not polluted. The removal of the quarantine on fruits and vegetables, which had recently been effected, possibly accounted for the renewed outbreak. In Cairo and at Moucha, near Assioot, there is an epidemic of virulent character now prevailing. In the ten days of July 15-24, inclusive, there were 307 cases with 227 deaths. There were eighteen new cases in Cairo on July 25th, 20 new cases on the following day, and 35 on July 28. Many of the natives die in the streets. The drinking fountains have been shut off and other sanitary measures are being instituted. The disease also prevails extensively in Manchuria, and it is announced officially that cholera is raging at Mukden, in that province. There were 757 cases between July 3 and 14, and 81 Russians and 363 Chinese died from the disease. Between July 15 and 23 the deaths numbered 106 Russians and 276 Chinese.—*Med. Record.*

The Lingual Tonsil.

Henry B. Lemere says that the trouble resulting from the enlargement of the lingual tonsil is one of adult life, and essentially of neurasthenics and of women. The symptoms are vague, consisting sometimes of weariness of the throat, recurring attacks of laryngitis, a nervous cough, the feeling of a foreign body in the throat, or indefinite pain. It is extremely bad practice to name the complaint globus hystericus, or paresthesia of the pharynx, without examining to see whether there be any lesion of the throat. Treatment consists in removal of the enlarged tonsil. The author finds the lingual tonsillotome the most useful in this operation. The application of cocaine makes it entirely painless.—*Medicine.*

The University College of Medicine, of Richmond Va., has prepared for free distribution a booklet entitled "Teaching Methods," which is of value to all persons who are at all interested in educational questions. It is noteworthy as showing the extent to which the best ideas on the subject of teaching have been adapted by them to the needs of their professional schools of Medicine, Dentistry, and Pharmacy.

TWO EXAMPLES

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Sodium Sulphite,	1 gr.
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Constipation.

℞ Sulphuris loti.....āā ℥i
Potass. bitartratis.....
Pulv. sennæ..... ℥ss
Syr. rhei..... ℥i
Ext. cascaræ sagradæ..... ℥ii
M. ft. confectio
Sig. Tablespoonful at night.
—*St. Louis Clinique.*

Rosacea.

℞ Sulphur præcip..... ℥i
Pulv. camphoræ..... gr.v.
Pulv. tragacanth..... gr.x.
Aquæ calcis.....
Aquæ rosæ.....āā ℥i
M. ft. Lotio. Sig Apply several times daily.
—J Nevins Hyde.

Migraine.

℞ Sodium bromide..... ℥ii
Tincture of strophanthus..... ℥ss
Cocaine hydrochlorate..... gr. iss
Orange flower water..... ℥vi
M. Sig. Tablespoonful t. i. d. in milk.
M. Kowalesky.

Headache.

℞ Quinine hydrochlorate..... ℥i
Capsicum..... gr. xii
M. ft. pill No. xii Sig. 1 pil t. i. d.
Indications, used in brow ague and malarial cachexia.

For Pruritis Ani.

℞ Ac. carbolic.....gr.xxx
Calomel..... ℥i
Tar..... ℥iss
Menthol..... gr. xx
Zinc oxide..... dr. ii
Simple cerate..... ℥ii
Wash the parts with hot water and spread the ointment on a cloth. Apply and fasten with a T-bandage.

Itch.

℞ Menthol..... gr. xl
Ichthyol..... dr. iv
Calcium sulphide..... dr. i
Sulphur..... dr. ii
Lalolin.....
Olive oil.....aa q. s. ad. dr. iii
M. S. Apply as required.
C. E. Boyntgn.

Pertussis.

℞ Pulv. bellad rad..... gr. ½
Pulv. Doveri..... gr. s
Sulph. sublim.....
Sacch. alb.....aa gr.vii
M. S. at dose. Repeat from 2-10 times daily p. r n.

Hyperexcitability of Stomach with Pyloric Spasm, etc.

℞ Hydrat. chloral..... gr. x
Aquæ..... ℥iss
From 15-30 drops in water after each meal

Dr. Frank Billings, of Chicago, was elected president of the American Medical Association at the recent annual meeting held at Saratoga, N. Y. He has been known among Chicago's medical practitioners and educators nearly twenty years. He was graduated from Chicago Medical College, now the medical department of Northwestern University, and, after a year spent as a interne at the Chicago Hospital, engaged in post graduate work at Vienna and Paris. Returning to Chicago, he accepted the chair of professor of medicine in Chicago Medical College, resigning to accept a similar position with Rush Medical College. He is now the dean of the latter college, and the head of its medical department. He is also attending physician to the Presbyterian and Cook County hospitals.

Dr. Billings is a man in the vigor of his manhood, and is a credit to the American profession. His appearance is indicative of everything that will contribute to a successful administration of the great office to which he has been called.

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Beef, Iron, Cinchona and Brandy go to make it. Any one of these given alone would do good. Consider, then, how much the benefit could be increased by combination!

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SURGICAL SUGGESTIONS.

Articles for Handy Use in Obstetrics.

Hot and cold water, fountain syringe, hot water bottle, scissors, sterilized sheets and towels, soft-rubber catheter, drinking cup, bed-pan, rubber sheets, antiseptic pads, and solution, plenty of light and pure air, safety pins. These, together with a good nurse and obstetrician, and with some good aseptic lubricant, mixed with the oil of patience and intelligent manipulation and care, will result in much being accomplished in confinement cases.—*Willington Johnson.*

Modern Method of Vaccination.

The skin is disinfected with warm boracic-acid solution. The lymph is then blown upon the skin, the skin put upon the stretch, and sacrification accomplished through the layer of lymph by means of an ordinary triangular-headed surgical needle. In this way the corium is thoroughly opened up and the emulsion brought into direct relation with the cells of the true skin.—*Copeman.*

Disinfectant solutions of proved potency in destroying the plague bacillus are bichloride of mercury (1-1000), chloride of lime (1-100), caustic lime (1-100), carbolic acid (5-100).—*James Cantlie.*

Fissued nipples are cured by the application of a 3 to 5 per cent. solution of potassium permanganate. The first applications are painful, but the pain soon disappears.—*Dombrovsky.*

Treatment of Wounds.

Unless you suspect that the wound is not aseptic let it alone, for blood is a better antiseptic than water or blood diluted. Remove all clots and secure all bleeding vessels before closing the wound. For oozing apply hot lint or cotton mops wrung out of sterilized water and maintain pressure for a few moments.—*H. J. Banker.*

Ectopic Gestation.

If called to a patient with a history of possible ectopic pregnancy who has just had severe pain in the pelvis, vomiting, fainting, pallor, with a weak voice and a rapid, feeble pulse, with abdominal tenderness, we should operate without delay.—*H. F. Twitchell.*

In chronic gonorrhœa, which has resisted all other methods of treatment, H. de Bran has obtained rapid and final cures from injections of picric acid in strengths of 1-200 and 1-100. In acute gonorrhœa one, two, or three injections daily, depending upon the pain experienced, are said to produce a cure in four or five days.

For aborting buboes Christian applies eight parts each of ung. hydrargyri, ung. belladonnæ, ichthyol and lanolin or lint every second day. It is his opinion that at least half of the buboes due to gonorrhœa, herpes, and chancroid can be aborted if treated before suppuration has commenced.

Newer Materia Medica.

Substitutors Steal Physician's Patients.

Incidentally, the Antikamnia Chemical Company is after "Counterfeiters" and "Substitutors" with a sharp stick. Their work in New York City is, no doubt, well known to our readers and they have now broken up a counterfeiting gang in New Orleans.

There can not be two views on the subject of substitution. It is swindling, pure and simple. Antikamnia and Antikamnia Tablets are made only by The Antikmania Chemical Company, of St. Louis, Mo., and when a physician prescribes either Antikamnia powdered or Tablets, he means the products of that firm. If his patient does not get them, a fraud is perpetrated, not only upon The Antikamnia Chemical Company, but upon the physician and his sick patient for whom the medicine was intended.

In other words, the doctor's patient is taken out of the doctor's hands, transferred absolutely to the substitutor's care and then given whatever remedy the substitutor thinks best. All this, irrespective of the doctor's diagnosis. In short, the treatment is in accordance with the "diagnosis" made by the substitutor. And as all substitutors are thoroughly saturated with avarice, greed and utter disregard of the most sacred rights of others, the fate of their victims can well be imagined. It is the purpose of The Antikamnia Chemical Company to expose and punish this crime wherever they locate it, and they have notified the trade that the least punishment "substitutors" of this kind can expect, is exposure of their guilt.

Putrefactive Processes.

As an anti-ferment, to correct disorders of digestion, and to counteract the intestinal putrefactive processes in the summer diarrhaes of children, Listerine possesses great advantage over other antiseptics in that it may be administered freely, being non-toxic, non-irritant and non-escharotic: furthermore, its genial compatibiltly with syrups, elixirs and other standard remedies of the Materia Medica, renders it an acceptable and efficient agent in the treatment of diseases produced by the fermentation of food, the decomposition of organic matter, the endo-development of fetid gases, and the presence or attack of low forms of microzoic life.

An interesting pamphlet relating to the treatment of diseases of this character may be had upon application to the manufacturers of Listerine, Lambert Pharmacal Co., Saint Louis.

Treatment of Pro-Senility.

Ferguson details a case of impotence following a prolonged attack of gonnorrhoea. It was his third attack, and his virile power was almost lost and he suffered from frequent micturition. He had in addition orchitis on both sides,

The case was peculiarly obstinate and many remedies had been used to no purpose. He had already exhausted the resources of several quacks. Sanmetto was prescribed in teaspoonful doses three times a day and improvement and recovery followed. — *Medical News, New York and Philadelphia.*

Sanmetto in Urinary Troubles in Old Men and Children.

So far as my experience has been with Sanmetto, in urinary troubles, it is one of the very best remedies we have at present. I recommend Sanmetto in urinary troubles in old men; also for children when subjects of that troublesome complaint, wetting the bed. I have practiced medicine over forty-five years.

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Sedgwick, Kans.

I have used Bromidia in cases of Insomnia, restlessness and threatened convulsions, with surprising results, finding that a dose of from drops 15 to one drachm to be sufficient according to age, and how often to be repeated. I have combined Bromidia with Papine where I wished to annul pain with excessive nervousness, the combination acting very happily also in bladder troubles. I use Bromidia and Papine very much in my family.

CHAS. E. QUETIL, M. D.
Philadelphia, Pa.

The American Medical Association.

At the closing session of the American Medical Association in Saratoga, the recommendation of the House of Delegates to meet next year at Little Rock was rejected, and it was decided to meet at New Orleans in May, 1903.

The North Carolina Booklet.—The editors of the North Carolina Booklet announce that should a sufficient number of subscriptions be received to warrant the publication of the North Carolina Booklet, it will be issued monthly as heretofore, for another year, beginning May 10th, 1902, the following being the proposed list of subjects: 1, May, Ku-Klux Klans, Mrs. T. J. Jarvis; 2, June, Our Pirates, Capt. S. A. Ashe; 3, July, Indian Massacre and Tuscarora War, Judge Walter Clark; 4, August, Moravian Settlement in North Carolina, Rev. Dr. J. E. Clewell; 5, September, Whigs and Tories, Prof. W. C. Allen; 6, October, The Revolutionary Congress of North Carolina, Mr. T. M. Pittman; 7, November, The Battle of Guilford Court House, Prof. D. H. Hill; 8, December, Historic Homes in North Carolina—The Groves, and others, Col. Burgwyn, Col. Waddell, Mr. Thomas M. Blunt, and others; 9, January, Old Charleston on the Cape Fear, Prof. James S. Bassett; 10, February, Raleigh and the Old Town of Bloomsbury, Dr. K. P. Battle, Sr., Conditional; 11, March, Confederate Secret Service, Dr. Chas. E. Taylor, Conditional; 12, April, The Story of the Albemarle, Major Graham Daves. Parties desiring to subscribe will please send at once their address with the subscription price, $1 for the year, to "The N. C. Booklet Co., P. O. Box 125, Raleigh, N. C." If for any reason the Booklet should not be issued each subscriber's money will be returned. Arrangements have been made to have this volume of the Booklet bound in library style for 50 cents. Those living at a distance will please add 5 cents in stamps to cover cost of mailing. State in ordering whether black or red leather is proferred.

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Aquae destil.,	ʒiii 90	

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[Ichthargin is the sulpho-ichthyolate of silver. It is a brown odorless powder, containing about 30 per cent. silver. It is soluble in water or glycerin, and is an astringent and bactericide.]

Internally, the following is of service:

℞	Copaibae,	ʒii	8
	Salol,		
	Pulv. pepsini, aa,	ʒiiss	10
	Mucilag. acaciae,	ʒi	30
	Aquae destil. q. s. ad.,	ʒiv	120

M. Sig. Shake and take one teaspoonful three times a day.

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	GRAINS			GRAINS
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Calcium Sulphate	25.71113	Sulphurous Acid	(SO2)	.08514
Strontium Sulphate	.73481	Chlorine	(Cl)	7.07743
Potassium Sulphate	1.17191	Iodine	(I)	.00105
Sodium Sulphate	64 04838	Bromine	(Br)-trace.	
Sodium Hyposulphate	.11663	Flourine	(Fl)	.04665
Magnesium Carbonate	.50153	Phosphoric Acid	(P205)	.00875
Calcium Carbonate	5.08299	Nitric Acid	(NO3)	.41406
Strotium Carbonate	.13413	Carbonic Acid	(CO2)	6.60976
Iron (ferrous) Carbonate	.39715	Lime	(CaO)	13.43569
Lithium Chloride	.01399	Strontia	(SrO)	.51319
Sodium Chloride	11.68057	Magnesia	(MgO)	2.77594
Sodium Bromide traces	——	Iron	(FeO)	.24669
Sodium Iodide	.00122	Potash	(K2O)	.63333
Sodium Arsenate	.00198	Soda	(Na2O)	34.17817
Calcium Fluoride	.09564	Lithium	(Li)	.00234
Calcium Phosphate	.01168	Alumina	(Al2O3)	.03499
Magnesium Nitrate	.49512	Silica	(SiO2)	.67648
Alumina	.03499			
Silicic Acid	.67648			
Carbon dioxide, combined with Mono-Carbonates	2.68321			
	120.92846			123.68326

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Current Literature.

THE AUGUST "MIND."—The August number of *Mind*, "the leading exponent of the New Thought," opens with an article by Mrs. M. E. Cramer called "My Spiritual Experience," which is accompanied with a half-tone portrait and biographical sketch of the author written by Charles Brodie Patterson. This is followed by a paper on "Jesuitical Occultism," by Dr. J. R. Phelps. The well-known metaphysical lecturer, Eugene Del Mar, contributes an essay on "The Conception of Unity." A most interesting article on "The Art of Enjoying" is from the pen of L. C. Ashworth; and Laura M. Dake, author of "In the Crusible," has an excellent occult poem called "Reminscence." The ninth paper in Abby Morton Diaz's series on "Hindrances to World-Betterment" is entitled "Having Eyes, They See Not." "Some New Thought Teachings," by Julia Iverson Patton, is instructive. Lucinda B. Chandler has a suggestive paper on "The Completion of Humanity," and C. G. Oyston asks "Why Do We Suffer?" Editor John Emery McLean discusses "Anarchism and Atheism," "Upland Farms Summer School," and other topics, and reviews some of the latest books. Bolton Hall has a fable called "Out of the Depths." The Rev. Helen Van-Anderson contributes "A Chat About Books" to the Family Circle Department, which has five other features. (Twenty cents a copy, or $2.00 a year. The Alliance Pub. Co., Fifth Avenue, New York.)

NORTH AND SOUTH IN SLAVERY DAYS.—Edward Everett Hale in his "Memories of a Hundred Years," (now being published serially in the *Outlook*, and soon to appear as a book), tells the following anecdote which illustrates very neatly the different ways of looking at the political and commercial aspects of slavery in the fifties:

Mr. Henshaw was secretary of the navy in one of the Southern cabinets. He was one of the leaders of the Democratic party in Massachusetts; one of the men "who kept that party conveniently small," so that all its leaders had Federal office. Mr. Henshaw was one of the early railway men, a man of foresight enough and courage enough to know what modern civilization would demand. It was long before the war that he was in Norfolk, Va., consulting with some of the leaders there as to the opening up of communication westward from their magnificent harbor. As he rode with one of his Virginia friends one day, the Southerner said, "You abolitionists say" this or that. Henshaw disclaimed the word. The Democrats of that day kept their garments very clear from such stains. The Virginian laughed. "I know you make your distinctions. But we call you all abolitionists." Henshaw would not laugh. "You are quite wrong," he said. "We are as fond of our ways as you are of yours. We manufacture cotton and wool and shoes and iron. We send our ships into every ocean. And if, to maintain slave labor, you choose to let your magnificent cataracts go to waste, to let your coal lie unburned and your iron unsmelted, to send your timber to us for our purposes, and never to build a ship in these waters, some of us, I assure you, are very much obliged to you." This was enough and the Virginian said in reply, "Well! Mr. Henshaw, pray do not think that we are all damned fools."

Newport News and its magnificent ship-building make the comment to-day on that anecdote.

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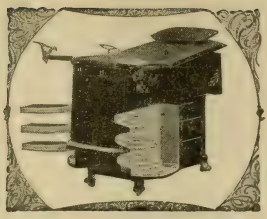
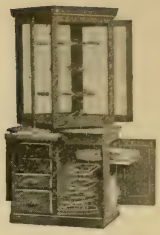

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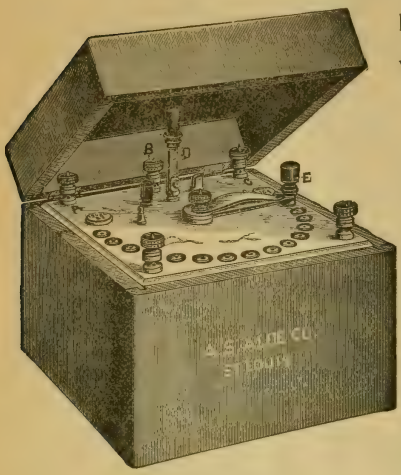

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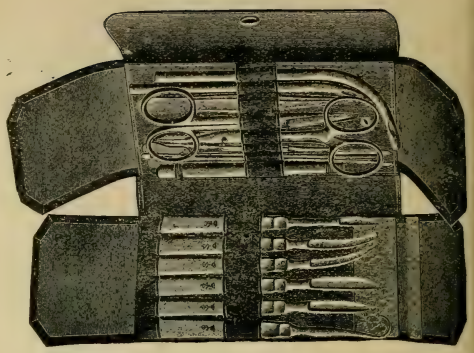

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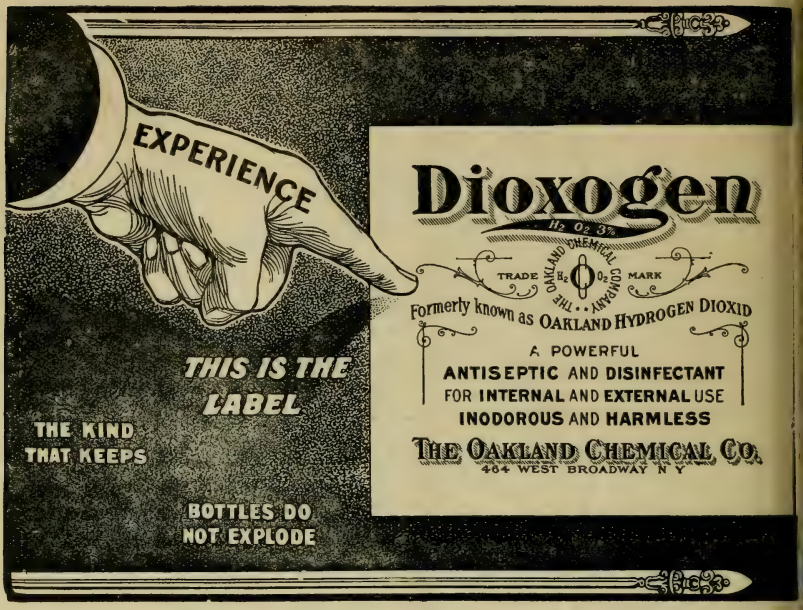

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EDITORIAL.

SIR FREDERICK TREVES AND HIS CAVENDISH LECTURE ON APPENDICITIS.

The prominence of the lecturer and his recent connection with the case of King Edward, makes any of his opinions upon the subject of appendicitis of special interest. American surgeons have not infrequently expressed surprise at the conservatism displayed by the medical attendants in the management of the king's case, but it was generally attributed to a not unnatural hesitancy in view of the immense responsibility involved. In his Cavendish lecture, Sir Frederick plainly indicates that the plan followed with his royal patient, is such as he would recommend in any case with a similar train of symptoms. His views, as may be seen by the following summary, will appear to American surgeons as decidedly conservative. He says:

1. "It is a mistake to base the necessity for immediate operation upon the idea that 'gangrene or rupture of the appendix,' 'perforation of the appendix' and 'appendicitis with acute peritonitis' mean the same danger and require the same treatment that do 'gangrene or rupture of the bowel.' 'perforation of the stomach' and 'acute peritonitis.'

2. "The greater proportion of cases of appendicitis recover spontaneously; if examples of all grades of appendicitis are inclined, the mortality of the disease will probably not be above 5 per cent.

3. "Operation carried out during an

acute attack is attended by a mortality of over 20 per cent.

4. "Relapses may occur after operation done in the acute stage.

5. "Removal of the appendix between attacks of appendicitis is attended by only a trivial risk."

He further says "the great majority of cases of appendicitis recover spontaneously without either an operation or the formation of an abscess," and that "in those cases in which an abscess has formed and healed, removal of the appendix 'may be indefinitely deferred, since by the occurrence of suppuration the patient is—in but a very small percentage of cases—cured of his trouble.'"

A writer in the Philadelphia *Medical Journal* takes decided issue with many of these statements of the British surgeon, especially as regards the mortality in cases left in the hope of a spontaneous recovery, and alludes to the subsequent attacks of appendicitis in many of these subjects. However, we presume that Treves would always advise an interval operation in those and hence prevent a second attack. We must confess though, that a mortality of 5 per cent. in all cases of acute appendicitis does seem below the mark. On the other hand his claim of a death rate of 20 per cent in cases operated upon in the acute stage seems to the writer before mentioned, as entirely too high, unless operations were done only after perforation had taken place and an abscess had formed. It would not represent the mortality of many surgeons who believe in operating before perforation has occurred. The author of the Covendish lecture is also criticised for promulgating views which, however safe they may be with a man like Troves, are not wise when instilled into the minds of general practitioners and students. Sir Frederick is an ardent advocate of the interval operation and says he has operated upon more than 1,000 patients between attacks with but two deaths.

A UNITED PROFESSION.

That the present, more than any age of which we have knowledge, is characterized by a tendency for men engaged in the various pursuits of life to come closer together for mutual progression and protection, is of universal acceptance. Within due limitations it will be admitted with equal unanimity, that this tendency is productive of great and benificent results. It is not our province, however, to discuss the limitations which wisdom would prescribe, and at which the objections outweigh the advantages of such unionism.

Our own profession, long the most divided and therefore, as a whole, the weakest, has at last felt the prevailing attraction towards a common center. This is observable in a great many directions, and the following item taken from an exchange is one of a great number demonstrating this fact:

"As an illustration of the present trend toward unification of the medical profession, two prominent physicians in homeopathy, one the secretary of the New York State Homeopathic Society, have voluntarily applied for membership in the Erie County Medical Association and have been accepted. These physicians are to be regarded as regular practitioners. It is expected that many others will follow their example and soon the profession of New York State will indeed be united."

The Carolina Medical Journal.

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ORIGINAL COMMUNICATIONS.

Prostitis.*

By Dr. A. J Crowell, Charlotte, N. C.

I have just prepared for the meeting of our North Carolina Medical Society, which met at Wilmington in June, a paper on retention of urine. In that paper I spoke of the grave pathological conditions produced by retention and that its most frequent cause was prostatic hypertrophy following prostatitis, which is usually produced by posterior urethretis; therefore I thought a paper on prostatitis might be of interest to you. I believe the prostatic troubles of old age can be eliminated to a great extent by properly treating acute and chronic prostatic troubles.

For convenience we will divide this trouble into acute and chronic prostatitis. It is an inflammation of the prostate gland and may be confined to the glands and peri-glandular tissue, or it may attack the entire organ.

The immediate cause of prostatitis is infection. This infection may be carried along the urethra as in cases of gonorrhœa; it may have its origin in the blood or carried by the urine as in prostatitis due to smallpox, typhoid fever, scarlet fever, and other infectious diseases; or it may reach the prostate by continguity of structure, as from periprostatic inflammation, etc. The predisposing causes are congestion from traumatism and instrumentation, constipation, excessive venery, masturbation, prolonged ungratified sexual excitement, hemorrhoids, retention of urine, and especially gradual and incomplete, strongly acid and alkaline urines, urethral calculi, athromatous vessels, chilling of the surface, etc.

The most common causes of acute prostatitis are gonorrhœa and the passage of septic instruments into the pos-

*Read before the Charlotte Medical Society, August, 1902.

terior urethra, causing a posterior urethritis. Instrumentation cannot be too severely condemned so long as there is gonicocci bearing discharge, and especially if the gonococo are still limited to the anterior urethra. It is almost impossible to wash the anterior urethra so thoroughly as not to infect the posterior urethra with gonococi by passing a sound into it.

In the early stages of acute prostatitis the prostatic plexus of veins are markedly dilated and increased vasularity throughout the whole gland. The inflammation usually begins along the mucous membrane of the urethra, extends along the ducts of the glands, obstructing them, forming supurating retention cysts. There may be a number of small abscesses, representing the inflammation of the small compound rasomose glands, which enter into the formation of the prostate gland, as a result of the occlusion, by inflammation of the little ducts leading from these little glands into the prostatic urethra. As the inflammation, secretion and breaking down of tissue increases, the glandular capsule may rupture and several merge into one, producing one large abscess cavity. The ejaculatory ducts are always involved in the general catarrhal inflammation and often become occluded from the inflammation and epithelial desquamation. When such is the case, we have tension in the seminal vessicles, increased congestion or seminal vesiculitis with painful emissions and all the symptoms of seminal spermato-cystitis. Occasionally the inflammation extends beyond the capsule into the connective tissue between the rectum and prostrate or even into the sub-peritoneal tissue. This may be due to the rupture of the pus through the glandular capsule or the transmission of infection through the veins and lymphatics.

Drs. Eugene Fuller, White, Martin, Swinburn, Von Schlen, Posner, and others have found in the study of a great number of cases that about 35 per cent of all cases of acute and chronic gonorrhœa suffer from prostatitis and seminal vesiculitis and that we seldom have seminal vesiculitis without prostatitis, though it is possible. Chronic prostatitis usually follows an acute attack and it may yield symptoms of so little note as sometimes to be entirely overlooked and disregarded, consisting only of a little sticky discharge, glueing the meatus together in the mornings. At other times the discharge is more copious and annoying. Tubercular prostatitis is quite common, but will not be taken up in this paper.

Green and Brooks in the study of their cases referred to in the paper I read before the North Carolina Medical Society, proved beyond a doubt to my mind that the principal cause of cancer of the prostate—a common occurrence—is chronic prostatitis. It is a well-known fact that inflammation produces hyperplasia and as the hypoerplasia increases we have chronic interstitial proliferation, compressing and irritating the alveolar enithelium; the blood vessels and lymphatic walls are thickened, the gland is congested, the walls of the alveoli are encroached upon, thickened and obliterated. The prostate gland is especially susceptible to such pathological changes as it is an organ abundantly supplied with blood vessels and highly cellular connective tissue. It is generally admitted by surgeons and pathologists that such irritation will produce cancer of the mamary gland, then why not expect the same thing in the prostate gland?

Symptoms:—These vary with the form and severity of the attack. In he mildest form there is a sensation of weight in the perineum with shooting ains, frequently of urination, difficulty n starting the stream with failure to xperience relief after emptying the ladder, pain on defication and espe- ially if the bowels are constipated, and enderness with enlargement of the land. If the inflammation is very pro- ounced, often there is a sensation as hough a foreign body were stuffed in he rectum, frequent and urgent urina- ion is the rule with small stream and assed with little force. The pain is sually severe and the stream often in- ermittent. When there is abscess for- ation, both local and general symp- oms are pronounced. There is con- ant pain in the perineum, aggravated y micturition, defecation and motion. itting or crossing the legs is especially ainful. Often erections are painful nd the emissions are usually very pain- ul. Occasionally we have hemorrhage ith and following emissions. This is pecially true when the seminal ves- cles are involved. Rigors with fever nd headache are nearly constant. As he swelling and inflammation in- eases, retention of urine may become mplete. Hemorrhoids often develop, used by pelvic congestion or strain- g effects to urinate. I frequently ave patients consult me for treatment r hemorrhoids and examination shows e trouble to be acute or sub-acute rostatitis, therefore, we should always e sure that our cases of hemorrhoids re not due to prostatic troubles, or we ill have failures following operations hen such is the case as the exciting use has not been removed.

In chronic prostatitis the symptoms re less marked. There is always more or less increased frequency of urination. After urination and during defecation there is a viscid milky discharge containing pus, columnar epithelium, and amyloid prostatic bodies. Occasionally we have severe burning pain in the perineum following defecation, but usually lasts only a short time. If the ejaculatory ducts and prostatic sinus are involved, slight pain may be attended the sexual act. Heat and bearing down in the perineum or rectum are complained of occasionally. Neuralgic pains radiating down the inside of the thighs and up into the fundus of the bladder, increased by exertion, are often the chief annoyance. Functional impotence or premature ejaculations are frequent occurrences. This is due to hyperaesthsia of the ejaculatory ducts. (Sterility may occur from occlusion of the seminal ducts by inflammation.) The patient often complains of headache or muscular and joint pains similar to those produced by toxaemia from other causes. The gland is enlarged usually and tender. The introduction of an instrument into the prostatic urethra gives unusual pain. These troubles usually have a pronounced effect upon the patient's disposition. The patient becomes melancholic, neuresthenic, and invalided.

Diagnosis:—The diagnosis of acute prostatitis is based upon the above symptoms and the detection by rectal examination or palpation of a hot, tender, pulsating tumor, occupying the position of the prostate. In addition to this, urinalysis and the examination of the massaged contents of the prostate gland will settle positively the diagnosis. The anterior urethra should be washed out thoroughly with warm water, the patient instructed to pass a small amount of water in two glasses.

The pus and shreads in the washings gives an idea as to the condition of the anterior urethra. The first flow cleanses the posterior and prostatic urethra and the second flow shows the condition of the urine in the bladder. In posterior urethretis and prostatitis, the urine in the first glass will contain pus and shreads. Usually there is some inflammation in the trigonum of the bladder with prostatitis, and when such is the case, we have more or less pus in the second flow of urine or that caught in the second glass. By massaging the peostate gland through the rectum and examining microscopically the massaged contents, we will often find gonocci; when due to gonorrhœa, after almost all symptoms of gonorrhœa have disappeared. We will also have in it blood, pus, epithelium, prostatic fluid, and spermatozoa. I make it a rule to examine the prostate gland in every case of gonorrhœa carefully before discharging my patient, even if there have been no symptoms of posterior urethretis. To emphasize the importance of examining the massaged contents of an old prostatitis or so-called gleet, I report the following cases:

Mr. P., aged 23 years, clerk by occupation, consulted me about one year ago with the history of having contracted gonorrhœa about two and one-half years previous to that time. He had been treated by as good physician as we have in the city, and after taking treatment for about one and one-half years, he was advised to get married; that the little discharge was only a gleet and would amount to nothing. He gave the history of having had an occasional morning discharge with slight glueing of the meatus ever since the acute symptoms subsided. At the time there was no discharge at the meatus. There were no shreads obtained by washing out the anterior urethra, but there were shreads and pus in the first flow of urine. The prostate gland and seminal vessicles were enlarged and inflamed. The massaged contents were examined and plenty of gonococci were found. This man had been married six or eight months and his wife had undergone two operations for pus tubes.

The second case I shall call your attention to is that of a young man now in my care. He came for treatment for painful urination, the pain being about half an inch back of the meatus, the glueing together of the meatus with occasional morning discharge, and painful emissions. He had had several attacks of gonorrhœa previous to the present one, which he contracted in April, 1901, but had been well of them two years previous to the present attack. After washing out the anterior urethra, the first flow of urine contained shreads, epithelium, pus, and a small amount of blood. There were a few pus cells in the second flow of urine and of course some epithelium. Endoscopic examination showed the anterior urethra to be in a healthy condition. On rectal examination I found the prostate almost twice the size of a normal one and quite tender. The vessicles were also swollen or distended and quite tender. The vessicles were stripped, the prostate massaged and their contents examined microscopically with the results seen in the specimens I have here this evening. I did not use the Gram method of straining in these specimens in order that you might get a better idea of the amount of pus there is in the specimens. You can readily see that there are plenty of gonococci in the specimens, and that

this man could easily infect others. It is only by microscopical examination that we can differentiate prostatitis, prostatorrhœa simplex, spermatorrhœa, and chronic anterior and posterior urethretis. The patient was under my care three weeks and I have been unable to find any gonococci in the massaged contents now for nearly one week. He went home yesterday evening feeling greatly benefited with instructions to return weekly for awhile for treatment.

Prognosis:—The prognosis of acute cases is favorable if free of gonorrhœal infection and even where there has been infection, provided the urethra is free from abnormal narrowing. When suppuration takes place there is always danger of septic phlebitis. These abscesses generally rupture into the urethra and is considered a favorable termination, but if the abscesses are of considerable size, it is less favorable since it leaves a pouch or cavity which will continue to suppurate, being irritated by the urine and calculi formation; these maintaining a chronic prostatitus. These abscesses usually rupture into the urethra, but occasionally rupture into the rectum, perineum and into the recto-vesical space. Multiple fistula are formed usually when these abscesses open into the recto-vesical space and are generally very hard to cure. In chronic prostatitis recovery is the rule when properly treated.

Treatment:—In acute prostatitis our aim should be to prevent the formation of pus or suppuration. Hot sits baths and hot applications to the perineum add much to the comfort of the patient, relieves congestion and should be used freely. In severe cases the use of cups, leeches and blisters may relieve congestion and lower tension. Anodines should be given to relieve pain. Morphine hypodermically and suppositories of opium, belladonna, coacine, ichtyol, etc., should be given. Absolute rest in bed with the hips elevated is essential. Hot rectal irrigations, with the Chetwood or some similar irrigator, with a normal salt solution, is very beneficial. The urine should be kept bland with alkaline diuretic and antiseptics. I frequently use with good results urotropin. The diet should be milk, broths and the like. The bowels should be moved freely at first and kept open with small morning doses of some saline. If retention of urine occurs, the catheter should be used regularly with utmost antiseptic precautions. It may be necessary to leave a small rubber catheter in until the acute symptoms subside if its introduction is very difficult. If in spite of all these efforts supuration takes place and it becomes evident that pus has formed, it is best to at once let it out by carefully dissecting up to the prostate and breaking up with the finger the little pockets of pus, irrigate thoroughly with a normal salt or boraic acid solution and drain with gauze. If possible prevent rupture of abscess into the rectum and avoid fistula as they are very hard to treat. The after treatment consists in keeping the external opening pervious until the cavity contracts down. If the abscess ruptures into the urethra, stimulate healing and contraction of the cavity as rapidly as possible to avoid the formation of calculi or chronic prostatitis by the irritation of the urine in the pus cavity. This is best accomplished by emptying the cavity of its pus by massaging the prostate gland through the rectum and irrigate it with a mild antiseptic solution; again empty the cavity and instill into the posterior urethra through a small rubber catheter about

one ounce of a two per cent. solution of protargol and allow the patient to retain it for ten or fifteen minutes.

The treatment of chronic prostatitis is necessarily long and tedious and a cure depends upon persistence in the use of appropriate remedies and the observance of the laws of health. The patient should understand this in the outset. The urine should be rendered bland and slightly antiseptic. The bowels should be kept regular. Hot baths, regular habits, and good digestion are essential. Regular and unemotional sexual intercourse is beneficial. The use of the ordinary endoscope has not given general satisfaction. Dr. Swinburn, of New York city, has lately devised one for the application of nitrate of silver and other such remedies to the posterior urethra that promises to be beneficial, but the bougies, dilators, etc., devised for the treatment of these cases are usually to be condemned; some, however, are materially benefited by their use.

To reach deep seated chronic prostatitis it is necessary to act directly upon the circulation of the organ. This is best done by massage, followed by posterior urethral irrigation with a mild antiseptic or astringent solution, preferably permanganate of potassium from 1:4,000 to 1:6,000, bichloride of mercury from 1:12,000 to 1:16,000, and nitrate of silver from 1:4000 to 1:6000. The massage expresses the contents of the prostatic glands and enables the cleansing, slightly stimulating fluid used for irrigation to act directly upon the diseased and congested mucous membrane. It is well to follow this with an instillation into the posterior urethra with a Keys syringe a few drops of a 1 per cent. solution of nitrate of silver on a half ounce of a 2 per cent. solution of protargol through a soft rubber catheter. In chronic prostatitis kept up by pus cavities massage is especially good.

Occasionally the posterior urethral dilator will act admirably in these cases. Faradic electricity is often of great benefit as it stimulates the action of the glands. Hot rectal irrigations with a normal salt solution is one of the best remedies at our command and are easily given with a Chetwood rectal irrigator. The water should be as hot as the patient can bear it. This should be kept up each night until the trouble is entirely well. The general condition of the patient should receive careful attention. Iron, arsenic and the hypophosphites have their place as tonics. Cod liver oil usually acts admirably in these cases. Tubercular prostatitis of course is benefited but little if not made worse by this line of treatment. Thalline and hot rectal irrigations often allay the symptoms, but massage should never be practiced.

As was stated in the outset, this paper was prepared because of the belief that hypertrophied prostate and cancer of the prostate are often produced by chronic prostatitis and that they can be eliminated to a great extent by properly treating acute and chronic prostatic troubles. I have lately done two prostatectomies for hypertrophied prostate and one cystotomy for cancer of the prostate that I feel sure were produced by chronic prostatitis. In every case of hypertrophied prostate I have seen lately that was at all annoying, I got a history of chronic gonorrhœa and chronic prostatitis.

Inebriety—The Necessity of Legal Adjudication and Restraint of Inebriates.

By Chas. Duffy, M. D., Newbern, N. C.

Mr. Chairman:

To the humanitarian on-looker of the events of every day life, no evil stands out in more glaring prominence or grotesqueness than the whiskey drinking evil. As an illustration it is said "the drink bill of the United States in one year is nine hundred millions of dollars." Nine-tenths of all crimes committed, it is estimated, are traceable to whiskey as a cause; four-fifths of all pauperism and about one-fourth of all cases of insanity. And when to these are added the number of idiots, imbeciles, and degenerates, that follow in its withering wake, and then the fruitful transmission of hereditary tendencies to the above enumerated curses, it's effects on the family, on the intellect, on society, on the State in the care of the disabled and alienated, it stands out in destructive proportions of the most appalling kind.

It is the universal experience of right thinking men that "life is poisoned by it, the home is poisoned by it, politics are poisoned by it, society is poisoned by it," and yet in the face of this arraignment we find physiologists still wrangling over the question as to whether alcohol is a food or a poison.

In June, 1899, Prof. Atwater, of Wesleyan University, reported before the Middleton (Conn.) Scientific Association, some experiments performed under his directions made with the purpose of ascertaining the nutritive status of alcohol, by which he found that a part of the stuff was oxidized in the body. Basing his definition of a food on this hypothesis, he placed alcohol once more in the category of foods.

To do him justice he limits the quantity masquerading as a food to two and a half ounces a day. Up to the time that these experiments were made, most physiologists were agreed that it had little or no food value in any quantity, therefore it is not surprising that Prof. Atwater's conclusions brought consternation to the camp of the antialcholic hosts, and some criticisms not very complimentary to the professor have been indulged in. Amidst a storm of protests against his classification, one of Prof. Atwater's critics characterized this alcoholic food as the "food of hell," and when I see how our criminal records and penitentiaries, our jails, our poor houses, etc., thrive and fatten on it, I am disposed to agree with him. A food that lets into the fireside the chilly blasts of despair and want, that drives the mother and children penniless into the streets, could hardly be classed as a healthful food. What addition does it make to the human body? Does it increase actual strength or muscular tissue? Granted that it increases the fatty tissue, is blubber of much value in any race or contest requiring the best physical condition? The giant, John Sullivan, might answer. Every one knows that if a man takes a drink of whiskey when he is cold or tired, he momentarily feels warmed and refreshed, but does not the tired horse feel the same stimulant effect when stricken with the lash? It is a cheat, a delusion, the same delusion which it shows when it makes the weak man feel he is a giant, or the poor man feel he is a Crœsus, or the fool feel he is an intellectual, brilliant.

Numerous experiments have proved that men endure fatigue and exposure to cold better, accomplish a greater amount of muscle work, without alcohol than with it, that even in small quantities it diminishes the mental

functions, increasing the number of mistakes made, lessening the power of concentration, reflection, the association of ideas, the memory and logic.

Let us now revert to another phase of the subject where as medical men we are specially interested. I refer to alcohol as a factor in the causation of diseases. For years through our Boards of Health and as individuals, we have been waging war against the pestilences, contagions, and infections. Along these lines we have done service in the cause of humanity which can never be remunerated or sufficiently appreciated. We jump on the typhoid bacillus with both feet wherever we find it. We go for smallpox, yellow fever, cholera, etc., the moment they make their appearance in our midst, with federal, state, and municipal forces at our back, and we generally vanquish them. Do you think these pestilences are more harmful than whiskey drinking? Need I ask you to run over the list of organs in the human body and try if you can pick out one that is proof against the baleful influences of continuous whiskey drinking? Cannot you recall from your experience many cases of cerebral and other organic degenerations, spinal atrophic affections, ataxia, aoplexies, diseases of the lungs, liver, stomach, spleen, kidneys, generative organs, and the train of disorders consequent on these diseases, that were directly traceable to alcohol as a determining cause? Then it is equally potent as an indirect cause, for example the otherwise sane and moral man under the influence of liquor will expose himself to the contagion of syphilis and other destructive and loathsome diseases, accidents of all kinds, etc.

I know you can refer me to instances of very old men who have drunk whiskey all their lives, and have remained comparatively healthy, but I might rejoin I have known men who have been through many hard-fought battles and have come out without a scratch. These exceptions do not carry with them the inference that these occupations are free from danger or conducive to long life. If the infringement of the laws of nature without exception were summarily followed by the enforcement of its penalty, there is scarcely a question that these laws would not so often be violated. If every man who goes into battle should be killed, there would soon be no more wars. Some men do not usually take the exceptions to the rule, as the guide of their conduct.

I do not wish to be understood as denying that there is any useful place in the economy for alcohol, on the contrary I admit it has its place as a medicine and in arts. Like strychnia, opium, arsenic, etc., there are conditions in which most physicians feel it is indispensible. It is not the legitimate use of this or any other poison I object to, but the indiscriminate or habitual use of it as a beverage, with the mistaken notion that it is good for all the ills that flesh is heir to. This notion when it dominates the victim usually bears him on to confirmed inebriety, where he loses all self control, and where he is pursued by an irresistible thirst for liquor.

This drink craving, as we all know, is one of the most difficult conditions to overcome the physician has to deal with, and on this account if for no other reason, we should heed our responsibility in the premises.

In prescribing it we should give no more than the necessity requires, always hedging about its use with warnings of

its subtile and dangerous consequences when continued beyond its strictly medicinal purposes.

But I need not continue to discuss the demerits of alcohol before this audience. I have already said enough to fix it as the king of evils, and I think it is not hard to reach the inference that you have not on your list of preventable diseases, any one more far reaching or destructive in its influences than this one now under consideration.

Do we not owe it to ourselves and the high purposes of our calling to put forth our hands on the body of this monster and shear him of his power? Is there any sound reason why we should trouble ourselves about smallpox, yellow fever, and such like plagues and let alcohol go unnoticed?

Mr. Chairman, I believe the Medical Society of North Carolina is strong enough to grapple with this monster. Fifty years ago you set out to give the people of the State good doctors, and to-day at every cross-road or backwoods country section you can find them, the equal of those in the cities. You then turned your attention to the sanitary needs of the people, and although the difficulties in the way seemed almost insurmountable, you have to-day a Board of Health doing glorious service to the State. I had the honor, Mr. Chairman, to be one of the committee who organized this board and formulated the list of diseases concerning which your inquiries and investigations are now being made. I am sorry, sir, to confess that this list is incomplete, and respectfully ask that you amend it and place thereon inebriety or alcoholic intoxication; that your reports may show the part this agent plays in the death roll of our State. And in the name of good morals, in the name of good government, and in the name of the women and children who writhe under its galling yoke, I ask each member of this Society to put forth his unrelenting efforts to stay the march of this chief of scourges of the human race.

And what can be done for the inebriate? No matter how good a man he may be when sober, he is as a rule, unsafe to be left to go at large in the community when under the influence of liquor. He is an irresponsible and dangerous man. He is cruel to his beast, or his best friend, insisting often that he is not drunk, or may be that he has "not touched a drop in a week." In this condition and when openly committing acts of violence, the State may arrest him under a criminal process, but as if too often the case, acts of cruelty and violence committed in the home away from the observance of the eyes of the law, where the victims are his helpless wife and children, go unpunished and unrestrained. Such a man if no more than one remove from a fiend, when in his sane condition would bless the hand that would restrain him from such brutality and violence. Can there be any satisfactory reason why such a man should be left to pursue his murderous tendencies while the insane or criminal of another class are taken into state custody and restraint? This inconsistency was recognized by the State authorities many years ago, when an enactment was passed: Public Laws of North Carolina, 1879, providing for the arrest and control of inebriates in certain cases, Sec. 1671 of these laws defines an inebriate as "Any person who habitually, whether continuously or periodically, indulges in the use of intoxicating liquors to such an extent as

to stupefy his mind and to render him incompetent to transact ordinary business with safety to his estate, shall be deemed an inebriate within the meaning of this chapter: Provided the habit of so indulging in such use shall have been at the time of inquisition of at least one year's standing."

This definition seems insufficient to meet the requirements under consideration in this paper. Many inebriates have no estate and therefore would not come under the provisions of the act, besides his own person, his family and his neighbors, should have at least the same protective care of the State, as his goods and chattels. To cover this defect I submit the following as an amendment to this section, to-wit.: Be it enacted that section 1671 of the Code be amended by striking out the word "to" in line two and the remainder of said section, and by inserting the words —"to such extent, either periodically or continuously, as to render him incompetent to transact his ordinary business with safety to his estate, or to render him obnoxious or dangerous to his family or to the community, or which periodically, at intervals or continuously, renders him cruel to, or neglectful of his family, shall be deemed an inebriate.

"Sec. 2. That wherever the word inebriate is used in said chapter, or in any of the laws amendatory thereto, it shall be construed to mean, any person who habitually, whether continuously or periodically indulges in the excessive use of intoxicating liquors or narcotics."

With some such statute as this, many cases of inebriety could be reached which are now without the pale of the law. Humanity and sympathy for the poor victim of this incontrolable vice, cries aloud for such supervision and control as will restrain him from the continued indulgence of his morbid appetite, thereby placing him beyond the reach of the means of destroying himself, or continuing a menace and a nuisance to society at large.

If a man should steal a chicken or a watermelon, only one time, the dignity of the State is offended, and no matter what has been the moving cause, whether to appease his hunger or to feed a starving family, he is adjudged a criminal, and it may be sentenced to the penitentiary, the asylum for the cure of crime, not with the purpose of torturing him or vindictively punishing him, but with the purpose of correcting his criminal tendencies and returning him to the community a reformed and law-abiding citizen. Very few people question the corrective agency of this institution, very few can doubt the propriety and justice of thus arresting and restraining the criminal. Do you know why? Is it not that these unlawful acts as defined by the Code have long been held as infringements of personal rights and violations of the moral code? Now when you compare the many cases of petit larceny, that are so promptly dealt with and are so largely the care and concern of the public regulations of the State, with the consequences of whiskey, and especially the part it plays in such acts as are usually overlooked by these authorities, are you not driven to doubt the even-handedness of justice, as now outlined by our penal code, in dealing with these conditions? Bear in mind, Mr. Chairman, that it is not the purpose of the context of this paper to punish the inebriate because he indulges in the excessive use of liquor, but to hinder or prevent him from becoming a criminal before the law, to restrain him from further indulgence in

a habit that will of necessity result in his committing acts of violence and other crimes, to cure him and restore him to a condition of sobriety and decency. Examined from this standpoint the proposed definition of an inebriate cannot be construed as abridging his private liberty, further than is absolutely necessary for his own, and the public welfare.

The establishment of well regulated inebriate homes under State supervision, for the care of such cases, would most probably work incalculable benefit both to the inebriate and to the State. The inebriate himself would bless the hand that would thus stay his course downward to perdition and despair. His poor wife and children would sing praises to the power that would send back to their home a regenerated normal human being, in the place of a fiend, and the gain to the State, of converting one drunkard from every county, into a useful citizen, cannot well be computed.

Agurin, a New Diuretic.

By Dr. F. Carbonell y Soles, Barcelona.

While pure theobromine is an excellent diuretic, it is insoluble, and its by-effects upon the digestive tract have rendered it desirable to produce a derivative which would be free from these disadvantages. The double salt of theobromine sodium and sodium salicylate, when introduced some years ago, seemed to meet all the requirements, but experience has since shown that it is not free from objection, having a more deleterious action upon the heart and kidneys than theobromine itself. Hence the field of application of theobromine salicylate has become quite restricted, and it must generally be given in conjunction with digitalis to meet all the indications and obviate any depressing effect. Theobromine salicylate not only reduces the cardiac action, but produces vomiting and irritates the kidneys, owing to the unfavorable influence of its salicylic acid component.

Agurin is a new theobromine derivative which has been prepared with the object of removing the disadvantages of theobromine and the by-effects resulting from its salicylic acid derivative. It is a white powder, easily soluble in water, having a bitter taste and alkaline reaction. It is readily attacked by acids which decompose it with the liberation of theobromine and sodium acetate. In agurin, sodium acetate replaces the sodium salicylate of diuretin. By reason of its composition it is free from the irritating effect of pure theobromine and diuretin upon the stomach, as well as from the injurious action of the latter upon the heart and kidneys, due to its contained salicylic acid. On the other hand the sodium acetate is well tolerated and assists the diuretic action of the theobromine, so that the field of indications of agurin is much more extensive. No particular caution is necessary in its administration, except that it should not be given together with medicaments of acid reaction, which may decompose it. In the conversion of the acetate in agurin into an alkaline carbonate in the blood the kidney is not irritated, as is the case with the salicylate. The diuresis is more marked, without any reduction of the heart action, or without increase of albumin in the urine in cases in which it has been present to a moderate extent before its administration.

The clinical data confirm these theoretical deductions. Destree, of Brussels, as the result of his experiments, concludes that agurin does not exhibit

the drawbacks of theobromine salicylate, while equally efficient even in one-half of the customary doses of the latter. My own results have been very satisfactory.

The first case in which I tried it came under by observation in October of last year. The patient was a man 50 years old, with vascular selerosis and quite pronounced myocarditis. A year ago the valvular insufficiency manifested itself, and soon edema of the lower extremities occurred, with persistent and distressing dyspnea. The urine, although scanty at first, did not contain albumin. After the patient had been confined to bed for almost two months the edema disappeared under a milk diet and the use of small doses of potassium iodide and spartein sulphate. The quantity of urine became normal, and the man was able to go out again, although not capable of resuming his customary work. Thus almost half a year passed; but three months ago the dyspnea and edema recurred, and the urine became scanty and turbid and somewhat albuminous. Under rest, milk diet, and diuretics, including diuretin, it was found impossible to restore permanently the normal excretion of urine and to rid the patient of his edema and dyspnea, although they were continued for more than two months. At this time I prescribed agurin in doses of 0.5 gm., four times daily. In the course of four or five days the quantity of urine, which had been 750 c. cm. daily, increased to 1800 c. cm. The edema subsided, the dyspnea diminished and the general condition of the patient improved perceptibly. At the end of four or five days, during the continued use or agurin, the quantity of urine again fell to 1000 c. cm., but it remained clear and free from albumin, and the edema failed to return. After discontinuing the medicament the urinary excretion again fell to 600 c. cm., on which account agurin was again prescribed, with the same result as above, until finally a more permanent improvement was brought about. The effect of the drug in this case could not be durable, because in a case in which both the kidneys and heart were affected the influence of theobromine could only be of short duration. At any rate, this case demonstrates the superiority of agurin over diuretin, since the latter exerted no special action upon the diuresis, and neither caused the disappearance of the edema nor improved the general condition of the patient. Altogether 50.0 gm. of agurin were administered without the least unpleasant concomitant effects.

Another observation is of interest. The patient was a man 38 years old, who had caught a heavy cold several days before, and owing to marked dyspnea was scarcely able to move about. An examination disclosed aortic insufficiency and weakness of the heart muscle. Under the use of digitalis and diuretin the edema and dyspnea soon disappeared, but as the patient did not take good care of himself a recurrence took place. The edema again became extensive, the dyspnea was extremely marked, and the urine scanty and albuminous. Pure theobromine was now prescribed in doses of 0.5 gm. every four hours with surprising results, the urinary secretion became more abundant, and the edema disappeared in a few days. Theobromine was continued in smaller doses, 1.0 to 1.5 gm. daily, sometimes in alternation with digitalis. By the end of about two months the patient had taken altogether 100.0 gm.

of theobromine without experiencing the slightest unpleasant effects. In October of last year agurin was employed in place of theobromine in doses of 0.5 gm. in wafers. Up to the present time the patient has taken about 20.0 gm. of agurin. Its effect both upon the edema as well as upon the dyspnea was apparently the same as that of theobromine. The diuresis, however, was somewhat reduced, although still marked. The agurin therefore was employed intermittently on alternate days with the result that much to my surprise its action was most favorable and completely successful.

At any rate, it is of great value to have a preparation which is equal in efficiency to pure theobromine, since the latter is very seldom as well tolerated as in the above case. In a word, agurin is a product deserving of special attention. In all probability it is a most serviceable diuretic for all cases of renal insufficiency due to diseases of other organs than the kidneys. Furthermore, in simple renal sclerosis, and perhaps in certain cases of parenchymatous nephritis, it is also of value. In the latter cases, however, it must be employed very cautiously and under careful supervision.

To Administer Castor Oil.

A "Medical Philosopher" gave the following "tip" in the *Midland Medical Miscellany* for May, 1882. Ancient as it is, it is not very well known, and as the writer has seen it successfully employed, it may be worth resucitating. "Mix a slice or two of well-browned toast or pie crust with some strong meat extract or gravy; add pepper, salt, and herbs, and heat the whole so as to produce an aromatic and flavorsome dish. Then mingle the oleum ricini therewith, and administer the combination at an opportune moment. Do not reveal its medicinal character; but merely describe it as a 'meal' that the doctor has ordered. By the adoption of this plan, a patient may be induced greedily to devour castor oil, and to declare through the mouthfuls that castor oil is one of those disgusting things that he never could and never will take. —*Medical Record.*

Cancer.

Take galangal root, grate or pulverize to fine powder, add zinc chloride, make plaster and apply all over the cancer surface; renew every day until the cancer begins to give way from the healthy tissue. I generally let the plaster stay on the cancer about four or five days, then remove and apply any good salve. In about ten or fifteen days you can remove the entire growth, and the place will heal very rapidly. With but few exceptions the knife is a failure.—*W. S. Robinson in N. Y. Medical Journal.*

How to Take Castor Oil.

The disgust for castor oil is due to the odor, not to the taste. If the patient grips the nostrils firmly before pouring out the dose, drinks same complacently, and then thoroughly cleanses the mouth, lips, larynx, etc., with water, removing the least vestige of the oil before removing the fingers, he will not get the least taste from the oil, which is bland and tasteless. It all depends upon keeping any air from entering the nose during the time while there is any oil present.—*F. S. Hough in Iowa Medical Journal.*

SELECTED PAPERS.

A Contribution to the Therapeutics of Anæmic Conditions.

By Dr. Hermann Metall, Assistant Physician to the General Polyclinic, Vienna.

(Translated from the German.)

In the medicinal treatment of the various form of anæmia, whether it be essential chlorosis or the so-called secondary forms arising from severe loss of blood and various diseases (tuberculosis, cancer, etc.), iron has always occupied the most prominent place. In the management of chlorosis, especially, the chief object is the administration of an adequate quantity of iron, since upon this depends the success of all treatment. As to the manner in which iron acts in anæmic conditions, that is a secondary matter. Whatever be its mode of action, it remains an empirical remedy and yet one of incontestable value.

According to the unanimous opinion of many authors the effect of iron in chlorosis cannot be replaced by alimentation. Reinert, Klein, Immermann, Ensli, and others have shown that typical chlorosis cannot be cured in any other way, even by forced feeding. Some of them have made a series of very careful experiments for this purpose, and reached the remarkable result that during superalimentation, extending even over a number of weeks, the quantity of hæmoglobin in the blood increased scarcely a few per cent., and remained permanently at this level. That this is actually so we daily convince ourselves in cases of chlorosis in girls of the better classes. These girls, if placed on a full diet, accumulate more fat, while the chlorosis remains practically unaffected—it requires iron. The dietary therefore plays a subordinary part in the therapy of chlorosis (Klein), and is to be regarded only as an important adjunct to the treatment.

I will now devote a few words to manganese, which is employed in combination with iron in some ferruginous preparations for the treatment of anæmia. Hannon already directed attention to this metal, which is a constituent of healthy blood, and which besides iron has an important bearing on the absorption of oxygen by the blood. In fact, experiments have shown that anæmic conditions are most successfully treated with iron in connection with manganese. Chalybeate medication is materially aided and promoted by the addition of manganese. Efforts have therefore been made to introduce combinations of iron and manganese into therapeutics.

After laborious attempts, Dr. Gude, chemist, succeeded in producing such an iron-manganese preparation, which is easily absorbed by the entire intestinal tract, evokes no concomitant effects, and, as is illustrated in the following histories of cases, has proved an excellent remedy for the formation of blood. The preparation referred to is Pepto-Mangan (Gude). It contains iron and manganese in an organic combination with peptone, and is a clear fluid, resembling dark red wine, of an agreeable, non-metallic, non-astringent taste.

The advantage of this preparation is that it exerts a stimulating effect upon the blood-forming organs, these being excited to greater functional activity, and that the favorable effect manifests itself even within a short time by an increased oxygenation of the blood. At the same time, this chalybeate, as already mentioned, causes no digestive disturbances and does not injure the teeth.

In regard to the daily dose of iron, Quincke maintains that it should range from ¾ to 1½ grains of Fe. Most clinicians prescribe commonly 4 grains, which considerably exceeds the maximum dose recommended by Quincke. Some of them, like Niemayer and Trousseau, give even 7 grains of metallic iron daily; hence Pepto-Mangan (Gude) should be prescribed in doses of one tablespoonful three times daily for adults, and one teaspoonful twice daily for children up to twelve years, after meals. Sour, fatty foods and red wine should be avoided during its administration. The preparation is much relished by all patients, and it is my custom to administer it to children in water, or, better, in cold milk with the addition of sugar, in which form it is very palatable.

After this brief introduction I will describe a number of cases which have been treated by me with Pepto-Mangan:

CASE I.—Mary B., 16 years old, has complained since a week of general debility and lassitude. She is very pale and restless, has no appetite, and suffers from headache and a feeling of pressure in the stomach. She is constipated and the menses are irregular. Diagnosis, chlorosis.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin per cent.	Bodily Weight.	Therapy.
August 2	2,480,000	20	49.2	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 9	3,212,000	25	50.	
August 16	4,020,000	30	50.5	
August 24	4,300,000	40	51.3	
September 2	5,000,000	50	53.4	

After a week, the appetite was good, no headache; at the end of the second week, no further disturbances; menses not painful, and lasting only three days (formerly five days). After four weeks the patient discharged cured.

CASE II.—Anna H., 23 years old, has suffered for three years from chlorosis, with irregular menstruation, palpitation of the heart, a feeling of weakness, and occasional syncope. Physical examination showed the presence of anæmic murmurs over the heart, as well as a venous murmur; no fever or œdema.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin per cent.	Bodily Weight.	Therapy.
August 4	3,750,000	35	55.5	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 29	4,010,000	60	57.8	
September 14	4,200,000	70	59.	

Appearance of menses after absence of 12 weeks; subjective disturbances have disappeared.

CASE III.—M. W., 16 years old, has suffered since a year from headaches, dyspnœa, tinnitus aurium, vertigo, and gastric disturbances. There was marked pallor of the face and of the mucous membranes; systolic murmurs over the mitral and pulmonary valves, with dilatation of the heart. No fever; spleen not palpable. Diagnosis, severe chlorosis.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin per cent.	Bodily Weight.	Therapy.
August 5	2,250,000	25	52.5	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 13	3,200,000	30	53.5	
August 16	3,350,000	35	55.5	
August 23	3,530,000	40	56.5	
September 1	4,250,000	45	58.	

The subjective symptoms rapidly subsided, the appetite improved, and the stools became regular. The menses reappeared in the second week of treatment after having been absent for a year.

Case IV.—M. P., 15 years old. Menses absent since one-half year; always scanty. Vicarious hæmorrhages from the nose. Since three months the patient has suffered from dyspnœa, vomiting, cardiac palpitation, general weakness, headaches, feeling of dulness and sleeplessness. Physical examination reveals anæmic murmurs, moderate dilation of the heart, venous murmur.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin per cent.	Bodily Weight.	Therapy.
August 5	2,400 000	20	47.	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 10	3,600,000	25	47.5	
August 16	3,850,000	30	48.5	
August 23	4,250,000	35	49.0	
August 31	4,700,000	40	49.7	
September 7	5,000,000	45	52.	
September 14	5,200,000	50	53.	

After the first week improvement set in; at the end of treatment disappearances of all disturbances. Increase of bodily weight, 12 pounds.

Case V.—J. K., 18 years old. Chlorosis. Anæmic murmurs, cardiac dilatation, loss of appetite, insomnia, general lassitude, and headaches.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin per cent.	Bodily Weight.	Therapy.
August 10	2,200 000	35	52.	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 24	3,000,000	45	55.	
September 12	3,300,000	60	57.	

At the end of the first week appetite vigorous; headaches had subsided. At the end of the fourth week no disturbance of any kind.

Case VI.—A. N., 19 years old, has suffered from chlorotic disorders since two years. Improvement occurred under a milk diet and a sojourn in the country. Since five months the patient again complains of disturbances: palpitation of the heart, lassitude, headache, vertigo, tinnitus, and constipation, anæmic murmurs and venous hum perceptible.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin per cent.	Bodily Weight.	Therapy.
August 17	4,500,000	25	53.5	Pepto-Mangan (Gude), one tablespoonful three times daily.
August 25	4,100,000	30	54.	
August 31	4,000,000	35	54.5	
September 7	3,950,000	40	56	
September 22	4,200,000	45	57.5	

The subjective symptoms diminished after a few days. The disturbances disappeared, the appetite improved, and the stools became regular.

Case VII.—J. R., 20 years old, has suffered from chlorosis since two years. Status præsens: General lassitude, palpitation of the heart, a feeling of pressure in the stomach, difficulty in breathing; menses irregular as well as dys-

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin per cent.	Bodily Weight.	Therapy.
August 22	4,250,000	30	52.	Pepto Mangan (Gude), one tablespoonful three times daily.
August 26	4,350,000	35	52.5	
September 5	5,420,000	40	53.5	
September 12	5,300,000	50	54.	
September 18	5,350 000	55	54.5	
September 27	5,300,000	60	55.5	

menorrhœa. In the last three months all the disturbances have become more intense.

The disorders have disappeared, the appetite is good, and the bowels regular; no anæmic heart murmurs.

CASE VIII.—L. N., 19 years old, complains of headaches, cardiac palpitation, vertigo; scanty menses.

The subjective disorders have vanished; menses more abundant.

CASE IX.—J. M., 16 years old, has

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin per cent.	Bodily Weight.	Therapy.
August 28	2,500,000	40	54.	Pepto-Mangan (Gude), one tablespoonful three times daily.
September 13	3,750,000	55	55.5	
October 1	4,300,000	70	57	

suffered since two months from palpitation of the heart, dyspnœa, feeling of pressure in the stomach, vertigo, tinnitus, and headaches. There is a slight cardiac palpitation, with systolic murmurs and a venous hum. Anorexia and constipation are present. The menses have been irregular since a year.

Date.	Red Blood Cells in Cubic Millimetre.	Hæmoglobin per cent.	Bodily Weight.	Therapy.
September 2	4,500,000	35	50.	Pepto-Mangan (Gude), one tablespoonful three times daily.
September 11	4,750,000	40	50.5	
September 20	4,850,000	50	51.	
September 29	4,950,000	55	52.	

Menses regular; bowels normal; no disturbances.

CASE X.—Z. F., 30 years old, had a miscarriage two weeks previously, with profuse hæmorrhage. After a month's treatment completely restored to health, and an increase of weight of four pounds.

CASE XI.—A. N., six years old; rachitis and anæmia. Under treatment an increase of weight of two-thirds of a pound. Much better appearance.

CASE XII.—J. W., 30 years old. Pulmonary tuberculosis and anæmia. After two weeks' administration of Pepto-Mangan (Gude), an increase in weight of two pounds and an increase in hæmoglobin of 15 per cent.

CASE XIII.—K. L., 50 years old. Cancer of the stomach, cachexia, and anæmia. During three weeks' use of Pepto-Mangan (Gude) the patient felt better, the appetite had improved, and there was an increase of weight of two-thirds of a pound.

CASE XIV.—A. B., 14 years old. Chlorosis; hæmoglobin 40 per cent. After two weeks' treatment, hæmoglobin 85 per cent.; disappearance of all disturbances.

CASE XV.—F. K., 18 years old. Chlorosis; hæmoglobin 35 per cent.; after two weeks' treatment 50 per cent.

CASE XVI.—E. J., 5 years old. Anæmia following scarlatina. After eight days' treatment with Pepto-Mangan (Gude) the patient developed a vigorous appetite, and recovered so rapidly that he could be discharged cured at the end of the second week.

Altogether, twenty-three cases of anæmia were treated with Pepto-Mangan (Gude), of which twelve showed a normal hæmoglobin per cent. of the blood after fourteen days, five after three weeks, and five after a month. On the other hand, one of the patients who had hereditary trouble (her father having suffered from pulmonary disease) was discharged only improved, the blood, after two months' treatment with Pepto-Mangan (Gude), showing only an increase of hæmoglobin to 75 per cent. This was probably a case of

tuberculosis which simulated an obstinate or severe chlorosis at its beginning.

Furthermore, two cases of acute anæmia after profuse hæmorrhages were treated with Pepto-Mangan (Gude). A favorable result was obtained as early as the end of the first week. In one instance the patient felt so well that only the fear of further hæmorrhage constrained him to stay in bed for another week. In the case of three women who had miscarried during the early months of pregnancy, and were making a very slow recovery from the resulting anæmia, I was able to obtain a complete recovery after four weeks' administration of Pepto-Mangan (Gude). In six other instances of weakness and anæmia following acute and chronic disease (tuberculosis, carcinoma, scarlet fever, etc.), a disappearance of the feeling of weakness and a considerable improvement of the general health could be observed in every instance.

The histories cited above will afford conclusive evidence of the high therapeutic value of Pepto-Mangan (Gude). Unpleasant concomitant effects and disagreeable sequleæ were *never* observed during the use of the remedy. Eructations, pressure in the stomach, and nausea were never noticed.

In conclusion I would say that Pepto-Mangan (Gude) is a valuable and reliable blood-building remedy, which can be recommended for general use in appropriate cases.

The Philippines Health Problem.*

By James A. LeRoy.

American occupation, all are agreed, has been of great benefit to Cuba in at least one respect, viz., that of sanitation. Due credit should also be given for work done in this direction in the Philippine Islands.

The public-health problem in the Philippines has been more complex in the same degree that the Philippines problem in general is more complex than that before us in Cuba. The Philippines are a pretty extensive archipelago; not a large majority, but only 10 per cent., or fewer, of the Filipinos speak and read Spanish; there was formerly the same Spanish laxness as to sanitary laws, if not a total ignoring of them, making the people naturally suspicious and hostile toward new, misunderstood, and, to them, unnecessary regulations; fifty thousand Chinese thickly settled in Manila are ready to oppose their defiance and stoical indifference to all measures of cleanliness; the Philippines are thousands of miles from our shores, in the Orient, where lax sanitary regulations prevail in most of the leading ports, while plague and cholera carry away their thousands almost unheeded among the teeming population centers.

One other obstacle will readily occur—the insurrection, the quelling of which chiefly engaged the energies of the American authorities for nearly two out of the three years since Spain's sovereignty ceased. And the insurrection has also engaged the attention of those at home almost to the exclusion of the *constructive* features of American occupation.

If the army medical officers had merely been looking out for our own troops, yet concentration in Manila af-

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*The author of this article, as secretary of Professor Worcester, of the Philippines Commission, had unusual opportunities for acquiring information on this subject. An interesting article from his pen on "The Race Problem in the Philippines" will be found in the current Atlantic Monthly.

ter the Spanish surrender must have turned their attention to the state of health of the population in general. But recognition of sanitary duties toward the public followed fast upon the organization of a provost marshal government of Manila, and Major Frank S. Bourns, a volunteer drafted from civil life to go out with Merritt, became the first American health officer of Manila, soon having a board to work with him. The United States Marine Hospital Service, a branch of the Treasury Department, was early represented, and, under Captain J. C. Perry, has ever since co-operated most effectively with the representatives of the War Department. A large and up-to-date quarantine station was last year completed at Mariveles, at the entrance to Manila Bay.

Laboratories were organized as soon as might be, attention first being paid to getting large supplies of vaccine virus from the carabao. A smallpox epidemic threatened Manila in the troublesome days of 1899, and the entire population (as nearly as might be) were vaccinated. So thoroughly has this work been followed up ever since in the ten inspection districts of Manila that smallpox has virtually been exterminated. Not a case, for instance, was reported in Manila from January 1, 1901, to October 1, 1901. Yet smallpox is endemic in the archipelago, its marks are very commonly seen in the faces of Filipinos, and its ravages have always in the past been looked upon almost with indifference.

A street-cleaning brigade was organized, and, under the supervision of an American, the native drivers of carabao carts and native cleaners of the open drains had in a year's time brought about such a change in the appearance of Manila that the British consul general made it the subject of a report to his home office. The work of garbage disposal was systematically undertaken, and the best results were obtained with the poor facilities. The public slaughter-house was made more nearly decent; crematories for dead animals were built, cadavers of horses and carabaos becoming gradually rare sights in the Pasig river or on unoccupied tracts; and the veterinary department organized a vigilant campaign against the ever-present glanders.

Except in the larger cities, Manila, Iloilo and Cebu, there was no special organization to deal with municipal health matters. The surgeons in charge at the many garrisons had great latitude, and under their direction compulsory vaccination was usually enforced; simple regulations as to cleaning streets, putting dirty premises in order, tying up pigs and thus lessening the chances of disease from filthy wallows in the middle of towns or under houses, cleaning up the markets, etc., were given to the sentries to enforce; and improvement had been noted in most of the towns, small and big. When these regulations were carried out in roughshod manner, as too often they were, the people were resentful and inclined to look upon them rather as measures taken expressly for their annoyance than as setting an example for public emulation; wherver more diplomatic and thoughtful officers had cloaked the forms of arbitrary military compulsion with polite consultation of the people and the giving of reasons, particularly where a resident native physician had been consulted and employed in bringing about the desired changes, the attitude of the people was almost unfailingly good, and they would point with pride to the improvements in their town.

Much good was done also by the

army surgeons in the provinces, whether in division hospitals or in out-of-the-way posts, by free medical attendance and more or less free dispensing of medicines. Many a surgeon has done in this way, entirely out of the line of his duties and beyond the recognition of his superiors, little and big services to natives which not only helped make the name "Americanos" more acceptable, but which were also geniuine responses to the call of humanity.

When the executive authority was transferred to civilians' hands in July, 1901, military orders were replaced by organic laws for all provinces under civil control. Under these laws there was begun the organization of provincial boards of health, and of municipal boards as well, wherever native physicians could be found to head them, responsibility for public health work thus being distributed, with centralized control in the general board at Manila, which is under the Department of the Interior, the President of which is Major L. M. Mans, temporarily detailed, and in which the native element also finds representation. Professor Paul C. Freer was summoned from Ann Arbor to organize a centralized plan of laboratories, chemical, biological, for making of virus, etc. Laws for the regulation of the practice of medicine and surgery and of pharmacy, for compulsory vaccination, regulating the manufacture of alcoholic beverages, and others of like nature were passed and put into execution. The combating of rinderpest, which had already destroyed in some provinces seventy-five per cent. of the draft animals, was carried on; and a campaign was inaugurated against the plagues of locusts which have periodically for centuries scourged the islands and reduced regions to the verge of famine, a fungus disease being imported from South Africa and introduced among the flocks of locusts in province after province. The service that will be rendered to the Filipinos if these two scourges, which have literally been worse than war these past two years, shall be mastered, can only be appreciated by one who has been on the ground.

As will be understood, this framework of a general scheme of sanitation for the archipelago has by no means been filled out in the interval since last July. And meanwhile, too, comprehensive plans have had to wait while the energies of the all too few engaged in the work were occupied in two hard fights, first against bubonic plague and now against Asiatic cholera.

Bubonic plague first appeared in Manila in December, 1899, in the Chinese quarter. Only the strictest of port regulations and the most rigid internal inspection held it within bounds during the hot spells of 1900 and 1901, and saved Manila from being embargoed by American, Japanese, and other ports. Medical experience in the Orient goes to show that it is a very insidious disease, that it gains steadily during hot, dry weather, and gives way gradually after the beginning of the rainy season while it may be held down to a very slight increase every year for three or four years and then suddenly burst into an almost uncontrollable epidemic. So while the deaths from plague in Manila during the hot seasons of 1900 and 1901 were averaging but a dozen a week, as against fifty to two hundred a day in the unquarantined English port of Hongkong, yet the constant fear was of a return with violence in 1902.

A thorough campaign was therefore organized last year. Rats having been demonstrated to be the principal car-

iers of the contagion, the plans of the Japanese bacteriologists and health officers were imitated, and poison and traps were used in quantities. Rat-catching brigades were organized under native and American inspectors, and the whole population was urged to bring in the rodents and be paid five cents apiece for them. All this seemed highly amusing to the Spanish residents, and the witticisms of the Spanish newspapers found echo among certain elements of the native population. The work went right on, however, each rat brought in being tagged with the number and street of the house from which he came, dipped in carbolic acid, and then "post-mortemed." When a rat was found to be infected with plague, the house from which it came was promptly made the subject of special inspection. As seemed necessary, it was disinfected, was ordered altered to make it more sanitary, or was torn down and removed altogether. New building regulations were being enforced at this time, resulting in the throwing open to the light and air of a number of Chinese dens, while in one case, an entire Chinese "street" was closed. Various prominent property owners felt themselves aggrieved, and not the least trouble was found in compelling decent conditions in some of the structures rented by the Spaniards; but compensation was, of course, always given for destroying property.

The rats of Manila have not, of course, been exterminated, but the number killed had risen in November first to five thousand a month, one to four per cent., showing plague infection in the daily post-mortems. The plague started in earlier than usual during the dry seasons, the first cases occurring in December, when the rains had hardly yet ceased. It fluctuated during that month and January. But the results of the vigrous campaign were seen when only one death from plague was reported during February. May, the hottest month, had before been the time of maximum; but it was held at *nil* during March, April, and May, and in June the rains began again.

The fight was won, but plans against it for all future were already under way, including the cleaning out of various filthy native sections in the Tondo district of Manila, the enlarging of the detention camp for a temporary residence for homeless people, and the consideration of a scheme of cheap public tenements built with regard for sanitation, when the Asiatic cholera appeared. It broke out in March in one of these same filty sections along the Tondo beach. The quarantine officers had for some months been fearful of this as Hongkong, Shanghai, and other Asiatic ports had considerable epidemics of the disease.

Another campaign of vaccination was at the time under way, a smallpox scare in the Cagayan Valley of Luzon having caused an accession of energy in this direction. Between January 15th and April 1st, over one million people in all the islands were vaccinated, among them all the people in General Bell's concentration camps in Batangas and Laguna. Happily, smallpox made headway but in scattered districts, and the cholera fight was not complicated by it.

Again, it was a case for impromptu action, employing as best might be the men and means at hand—both insufficient. The work was rapidly systematized. Manila was redivided into twelve districts, with an American physician in each, aided by a corps of in-

spectors, part Americans and part natives, and a house-to-house inspection has ever since been kept up all the time. Cases, if not too far gone, are removed to the cholera hospital; but many of the people attacked die in from one to three hours, and cannot be removed at all. Those whose relations to the persons attacked are such as to make it likely that they may have contracted the disease are taken to the detention camp and kept for five days. This detention camp was the one that had been built as a precaution against a possible epidemic of the plague. A detention hospital and cholera hospital were also established at the same point, at the outskirts of the city, using them until they became too badly infected. Meanwhile, a much larger detention camp had been built outside the city, near Santa Mesa, fitted out with tents, bath houses, latrines, and a large kitchen. A second cholera hospital of bamboo and nipa thatch was shoved up, also a detention camp for people desiring to leave the city during the epidemic. A new antiseptic, recently produced by Professors Freer and Novy, of the University of Michigan, is being used very successfully in the treatment of the cholera, being in fact the only thing that has yet given results in Manila. At first the mortality ran above 90 per cent.; it has now been reduced to 70 to 75 per cent. General Chaffee gave hearty co-operation, furnishing some twenty medical officers from the army.

An attempt was, of course, made on the very start to prevent the spread of the disease into the provinces. Some hundreds of policemen and constabulary were employed for the purpose; but, as General Otis could not shut up Manila with fifteen thousand soldiers, it is needless to say that this attempt could not succeed. First, the disease spread by native crafts going to the towns around Manila Bay. Then it started north along the railroad, but its march was opposed so vigorously that it took nearly two months to travel the one hundred and twenty miles through Bulacan, Pampanga, and Pangasinan provinces. The provinces up the river from Manila soon caught it, and some few cases have appeared north of the central of Luzon. One of the inter-island steamers took it to the southeastern part of Luzon; otherwise the rigid port quarantine has yet to record a single failure, with the result that, up to the 25th of June, the disease had not got outside of the one island.

Before physicians could be sent out from Manila, the disease had created fearful havoc in several of the provincial towns. The town of Orani, in Bataan, for instance, suffered almost as many deaths up to May 15th as Manila itself, showing what would be the ravages of the disease when unopposed. As soon as possible, however, American doctors, disinfectants, etc., were hurried to each of the attacked towns, while the organization of native provincial and municipal boards of health, then in process, was completed so far as might be. Some towns in a province so far advanced agriculturally as Pampanga, for example, lacked both resident physicians and drug stores.

The constant fear was of contamination of the city water supply from some one of the towns on the Mariquina river above the intake. In this event the deaths in Manila would have jumped into the thousands at once. A troop of cavalry and a battalion of infantry were stationed in these towns to guard against this danger. From the government ice plant some fifteen thousand

allons of distilled water per day have een supplied free to the inhabitants Manila, well-to-do people driving ere for it, while the poor people go to stribution stations or get it from per- nbulating water wagons.

Quite naturally these rigorous meas- es aroused much opposition. The ass of the Filipino people is very fatal- ic about disease and death, and, from st lack of schooling, very ignorant to modern sanitary measures. It is ry difficult to get native inspectors o will perform their duties intelli- ntly and at the same time impartially. the need for a greatly increased force inspectors, school teachers, police- n, and other Americans, some of om proved not to be of the right sort, re pressed into the service; among m were some who had slight regard the natives and who enforced the eady distasteful regulations in an warranted manner, increasing the pular opposition. Meanwhile the anish newspapers were referring to disease as "official cholera," and re than insinuating that it was not genuine thing, but only an aggra- ed "stomach-ache." What ground re is for saying that some of the r-led native priests told the people in confessional that the Americans re only making this a pretext for assing them, it may be hard to say; it is unquestionably true that there s considerable ecclesiastical scoffing, d it is more than hinted that the high- church authorities had to be warned inst this sort of interference.

There were, in the nature of things, ses of a more or less serious sort at outset, and the detention camps e organized too hastily to run othly from the first. The opposi- to entering them was so strong for a time that some people would bury dead members of the family secretly by night so as not to be taken to the camps. When the members of one or two prominent Filipino families were attacked, however, promptly moved to the improvised hospitals, and recovered under the American treatment, this opposition lessened. Gradually, too, the camps were put into better shape, and the food supplied was soon better than most of the occupants were accustomed to having. They were allowed to cook for themselves also, and, finally, arrangements were made to allow those who preferred doing so to remain quarantined for the required period in their own houses. Most of the vegetables and fruits ordinarily eaten by the common people had to be put under the ban, and the filthy methods employed in the number of Chinese "restaurants" required that most of their staples, so large a part of the people's diet, be also embargoed. The authorities themselves have tried to supply their place by the sale of foods, the cooking of which had been supervised by competent persons.

Professor Dean C. Worcester, secretary of the interior, was himself the foremost in the fight from the first. Personal visits to the detention camps, to the hospitals, and to places in the provinces from which complaints came resulted in the correction of some abuses and the proper discipline of one or two Americans who exceeded their authority in the provinces.

As a direct result of the strain upon him, Dr. Franklin Meacham, chief health inspector, died in the middle of April. He had been sticking to his long round of work for ten days with a temperature of 104 degrees, not letting any one know he was ill. The cause of his

death was heart failure, which also carried off Mr. Mudge, who had organized and carried on the street-cleaning system of Manila and whom it will be almost impossible to replace.

Dr. Frank S. Bourns, the former health officer, who is now in the Philippines as manager of a business concern, at once dropped his personal interests and volunteered to take Dr. Meacham's place. He held it for a month, his tactfulness and wide acquaintance with the natives enabling him to dispose of much of the opposition to the measures adopted.

Up to May 1, the largest number of cases in Manila was thirty. During May conditions gradually improved; but June has witnessed a slight recrudescence of the disease, the cases sometimes running as high as thirty-five and forty per day. During the first three months, to the middle of June, there was a total of 8,500 cases and of 6,500 deaths, approximately, of which 1,125 deaths occurred in Manila. These figures assume larger proportions in the United States than in the Philippines; they hardly make the disease an epidemic over there, viewed in the light of past history. During this century, there have been fearful epidemics of cholera in Manila in 1820, 1862, and 1880, and I have been told by inhabitants that there were 36,000 deaths from it in Manila alone in 1880. Indeed, the basis for the scoffings of the Spanish press as to "official cholera" was that "real cholera would be a lot more serious than this."

The lack of physicians in the Philippines has been noted. Except for the comparatively few educated in Europe, to be found in the most important cities, the native physicians got their equipment at the friar-directed college of St. Joseph at Manila. Various of the "standard" authorities in use there date back to 1845; the teaching of anatomy is a farce, and, it is said, no female cadaver has ever been dissected there; until within the past few years, bacteriology was not taught at all, and, unless they have been bought very recently, it is now taught without microscopes. Comment is superfluous.

The majority bills pending in Congress contain authority for the city of Manila to bond itself to construct a sewer system. Various plans have already been presented and are being considered. At present, the only sewer is a more or less unworkable, short one, submerged at high tide, finding an outlet in the moat of the Walled City, which comprises but a small part of Manila. Surface drainage, drainage into one of the "esteros," or no drainage at all prevails elsewhere. These numerous "esteros," or creeks, natural and artificial, running into the Pasig river, hence filled and drained every day by the tides, are unwalled and are, in most places, festering sources of contamination. Manila lies on flat, alluvial soil, on either side of a winding river, and the frequent heavy rains leave large sections of the territory it covers inundated for hours.

The engineering features of the city water supply, constructed twenty-five years ago, are most creditable to the Spaniard who carried out the plan. Gauged by present day requirements, however, the quality of the water at the intake leaves much to be desired, while, with the growth of population, there is much need for increase of the supply.

Tuberculosis is the most common cause of mortality among adult Filipinos in Manila, and perhaps in all the

rchipelago. The civilized natives, and articularly the men, are, as a rule, flat-hested and puny, while poor nourish-ient, in the form of a rice and fish diet, iakes them to more easy victims. In-reasing their wants, raising the stand-rd of living, will probably be the most ffective way of checking tuberculosis. ts great prevalence among the poorer lasses of Manila, however, has led to ome planning for a consumptives' col-ny outside of the city.

The number of lepers in the islands as been estimated variously at from ve thousand to thirty thousand, while n thousand is a fair guess. There a leper hospital for several hundred itside of Manila, and the former gov-rnment had also established similar istitutions at three other points in the rchipelago. The Molokai colony of ie Hawaiian group has now been se-cted for imitation, and the American uthorities have decided upon a small-ell-watered, and fertile island, now most unoccupied, upon which to es-blish all the lepers of the Philippines.

These are but hints at the work apped out. Space may be taken for ist a few figures, to show what has en accomplished in the past three and ne-half years at Manila:

The death rate for the month of Oc-ber, 1899, the first month for which e have reports, was 61.39 per 1,000. he death rate for ten months of 1900 as 41.99, as compared with a rate of 3.4 for the same ten months of 1901, gures for the other two months not ing available. The present cholera idemic has, of course, raised the rate, it, in the main, the figures go to show at, during the period of American oc-pation, the death rate in Manila has en lowered nearly fifty per cent. hese results, it may be added, were obtained using as a basis the first health board census, which gave Manila 244,-000 inhabitants, including 45,000 Chi-nese. A recent, more nearly accurate census gives a population of 302,154, as follows: Filipinos, 223,900; Chinese, 60,650; Spaniards and other foreigners, 7,852; Americans, 6,822.

Based on the reports, the monthly birthrate for Manila rarely rises above 25 per 1,000; but, as the confinements of most native women are not attended by physicians, often not even by mid-wives, the reports of births are very incomplete. The high infant mortality may be judged from the fact that in November, 1901, for instance, out of a total of 848 deaths, 505 were under one year of age, 301 dying of convul-sions.—*The Outlook.*

Benign Facial Neuralgia.

According to an extract in *New York Medical Journal,* aconite ranks first in the treatment of facial neuralgia, but it must be attentively watched and its ad-ministration stopped on the first sign of intolerance, such as numbness of the face and tongue.

The following combination is recom-mended by Medclaff:

℞ Tinct. aconti rad.
Tinct. colchici sem.
Tinct. belladonnæ, āā..... ʒi 4

M. Sig.: Six drops to be taken every six hours in water.

The following has also been recommend-ed:

℞ Croton-chloral.
Glycerini (pure).
Confect. rosæ, āā.....gr. xv 1

Mt. Ft. pil. No. xx. Sig.: One every hour.

Or:

℞ Croton-chloral.....gr. xv 1
Glycerini (pure)..... ʒii 60
Essentiæ menth. pip ..gtt. iii 20
Syrupi simplicis ..... ʒvi 24
Aquæ ..... ʒii 60

M. Sig.: One teaspoonful in water every two hours.

MEDICAL NEWS AND ITEMS.

The plague in India has greatly decreased.

Cholera is epidemic in Manchuria, and has now broken out in Astrakhan, Russia.

Cholera has appeared in all quarters of Cairo, and temporary hospitals are being erected.

According to Sweden's last census that country has the lowest death-rate yet attained by any nation.

Professor Trowbridge, of Philadelphia, discovered this year that lightning never strikes the surface of the water.

Dr. F. H. Baetjer, of Johns Hopkins Hospital, has been sent to Europe by that institution to study the X-ray treatment of cancer.

A hospital for negroes with fifty beds, known as the Lang Hospital, has been opened in Kansas City. Lang was manager for Blind Tom.

Every vacancy in the medical department of the navy has been filled, but the supply of surgeons is still inadequate for the service.

Dr. Symanski, of Russia, has proved that tetenus toxin will long resist putrefaction, he having discovered it in a dead body thirty-six years after burial.

Both Washington and Chicago have epidemics of typhoid. In Washington there are 256 cases. The epidemic is supposed to have started from polluted milk and spread by flies. In Chicago there were 53 deaths from typhoid in the week ending August 23.

The oldest medical society in this country, and one which is still in a state of activity, is the Litchfield Medical Society of Connecticut, which was founded in 1765.

Dr. George A. Lung, surgeon, United States navy, has been chosen by the Navy Department to succeed Surgeon-General Rixey as medical attendant to the President.

Prof. Lannelongue, of Paris, recently made the statement that the Egyptian mummy of the eleventh dynasty, dating back 5,000 years, showed the result of an operation for appendicitis.

Frank Beehler, of St. Louis, has been struck three times this year by lightning. The latest shock nearly killed him and he was numb and paralyzed for three hours after the occurrence.

It is said that in some localities in Southern California no man can live over ten hours without drink, the dryness of the atmosphere causing the liquids of the body to evaporate quickly.

Dr. George H. Simmons, editor of the *Journal of the American Medical Association*, who was recently operated upon for gall-stones, is making steady progress toward satisfactory recovery.

At Gloucester, R. I., a horse was recently struck by lightning and apparently recovered, but since that time if a hand is placed on the animal's back it will drop to the ground. If a harness is put on the horse will fall like a shot

Otto Rosalsky, former assistant district attorney of New York, has had an operation performed on his left arm for

blood poisoning, which followed the bite of a mosquito. He and District Attorney Jerome were playing a game of billiards, when the insect bit him. He paid slight attention to it at the time, but the next day his arm was considerably swollen, and then an abscess formed and this required a surgical operation.

A meeting will be held in the Olivia Raney Library building, Raleigh, N. C., Tuesday, October 28th, at 4 o'clock, p. m., also Wednesday, 29th, at 10 o'clock a. m. The object of the meeting is to organize a North Carolina Nurse's Association for the purpose of registration and legislation. All graduate nurses and all training schools are urged to take an active part in the discussions. Raleigh Nurses' Association, W. L. Wyche president; R. G. Hill, secretary.

At Wilkesbarre, Pa., recently the child of a Russian family was struck by lightning as it lay in its cradle. It was immediately placed in a grave dug two feet in the earth with only its head protruding. When it was discovered by the town authorities the rain was falling upon it in torrents. The Russian explained that they had been taught that the earth would absorb the electricity, and, indeed, the measures taken certainly did no harm to the child. It has since recovered.

Scientific findings can be obtained from newspapers which are of deep interest, whether true or not. A St. Louis newspaper says: Among the curious cases of the effect of lightning stroke is that of Henry Longman, of Summerville, Pa., who was struck this spring. Ever since then anyone who shakes hands with him gets a shock. By passing the blade of a knife between his thumb and fingers during the progress of a storm he charges the metal so strongly that weights may be lifted with it. It is dangerous for a person to touch Longman when a storm is approaching, but he himself feels no inconvenience from his old condition.

The Medical Alliance of America, a foreign corporation, has been licensed in Indiana, says the *Medical News*. It is a Canadian concern, and its method of operation is novel in the extreme. For a stipulated sum, which is to be made nominal, the company guarantees to furnish all the medical attention required during the year for a family. The patrons of the alliance may select any physician they choose, and they may call on him for services as often as they like. For their payment to the company the physician's fee will be taken care of by the alliance. The company keeps up its end of the bargain with physicians by taking them into the alliance.

Up to June 29, 1,740 cases of cholera, with 1,385 deaths, occurred in Manila, while 9,444 cases with 7,038 deaths developed in the provinces. Lieutenant-Colonel Maus says that there have been probably 2,000 more deaths in the provinces, records of which have never been kept. The natives, according to the *Philadelphia Medical Journal*, tried to conceal the existence of cholera, and on that account absolute authority has been given the medical officers of the army. In the city of Manila, containing over 300,000 inhabitants, the deaths in any one day have not exceeded thirty, while in the provinces the death rate has been double this. Quarantine regulations now make it almost impossible to get in or out of Manila. Up to May 12, the provincial medical board had succeeded in keeping cholera out of the provinces

of Albay, a strict shotgun quarantine having been adopted. Though the cholera has twice appeared on shipboard in ports of the province, no communication with the shore was permitted. In Colonel Maus' last report, dated May 15, the death-rate was 6.01 among the soldiers—less than for any month on record.

The following are extracts from a bulletin just given out by the State Agricultural Department of Minnesota: The opinion entertained by a great many people that whole wheat and Graham bread is more nutritious than that made from standard patent flour, the flour used in every-day baking, is erroneous. When milk was used as a ration with bread, butter, beans, eggs, and potatoes, all the protein of the milk was digested, and in addition 4.91 per cent. more of the protein of the other foods with which it was combined was digested than when the milk was omitted. The highest degree of digestibility was secured in a mixed ration. Experiments made with butter showed that it has a high degree of digestibility, 98 per cent of it being available to the body. Cheese should be used in the diet regularly and in small quantities rather than at irregular intervals and in large quantities, as is frequently the case. Cheese ordinarily is one of the cheapest and most nutritious foods that can be procured. It is possible to secure a larger amount of digestible nutrients and available energy from cheese costing 15 cents a pound than from meat costing 10 cents a pound. Oatmeal, like cheese and beans, is slow of digestion, requiring much intestinal work for the digestive process; but if well prepared and thoroughly cooked it is a suitable food for persons of all habits.—*Medical Age.*

Radiotherapy for Cancer and Other Diseases.

W. J. Morton (*Medical Record,* May 24, 1902) says that radiotherapy broadens our conception of the possibilities of the therapeutics of modern medical science. The X-ray has a general application for the relief of pain.

As to technique, a standardization as to apparatus and its capacity and as to duration and frequency of treatments and distance of the tube is recommended to operators.

The X-ray has a curative effect in internal cancer and other internal diseases.

For superficial diseases a medium soft tube may be used, for internal cases a hard tube. The hard tube is applicable, however, in all cases.

X-radiation is recommended prior to any operation, to clear the tissue of cancer particles and foci, and to circumscribe the disease.

X-radiation is recommended after operation to preclude a recurrence.

X-radiation may be recommended in place of operation, and may be preferable to one for the reason that operation secures but a comparatively moderate percentage of permanent recoveries, and because up to date the X-ray procedure shows a continued improvement in cases, and a percentage of cures which will, undoubtedly, compare favorably with surgical operations.

There is danger to the patient, or uncertainty as to what might be accomplished, when the X-ray is employed by immature operators.

In X-radiation we possess more nearly a solution of the problem of curing than by any other method of treatment. —*Medical Age.*

TWO EXAMPLES

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THERAPEUTIC HINTS.

Alimentary Treatment of Intractable Vomiting of Pregnancy.

Dr. Gros (*Province medicale; Revue medicale du Normandie,* August 10th) adds to his previous communications the case of a woman in the third month of pregnancy, who suffered from incessant vomitings which nothing seemed to allay. After one day in which she vomited more than twenty times, alimentation was first reduced to half, and then replaced by five rectal nutrient enemata composed as follows:

℞ Buillon..150 grammes (4½ ounces).
Yolk of eggs.....no. 4
Sodium chloride. 1 gramme (15 grs)
Laudanum.....4 drops.
M. ft. enema.

Vomiting continuing the next day, mouth feeding was entirely suspended. The vomiting then disappeared completely, and on the fourth day the enemata were discontinued, while progressive mouth feeding with small quantities of milk was returned to. The vomiting did not reappear. Mixed feeding does not give the best results, mouth feeding must be entirely suppressed. Patients have been nourished entirely by the rectum for six, seven, and even fourteen days, without notable loss of weight or strength.—*Med. Review.*

Muscular Rheumatism.

Progress medical for January 1 gives the following:

℞ Balsam of Fioravanti.
Spirit of camphor.....aa m. 300
Oil of turpentine.....m. 45
Chloroform.....m 75
Menthol.....gr. 30

M. For local application, with or without gentle friction. — *Maryland Medical Journal.*

Treatment of Acne.

℞ Zinc sulphate..... ℥ j-ij
Sulphuret of potash..... ℥ j-ij
Sulphur. precip.. ..... ℥ j-ij
Aqua rosae q. s. ad..... ℥ iv

M. Sig.: The zinc and potash should each be dissolved in half the quantity of water, and the second added to first slowly, with constant stirring. The sulphur should be first made into a paste with the resulting solution, and then thoroughly mixed in mortar.

Acute Rheumatic Arthritis.

℞ Trimethylamine.....m. 7½ to 22½
Tilia flower water. ..... ℥ 4
Syrup of mint ..... ℥ 1
M. A tablespoonful every two hours. Or,
℞ Trimethylamine hydrochloride
.... m. 7½ to 15
Distilled water ..... ℥ 4
Balsam of Peru ..... ℥ 1
Syrup of mint ..... ℥ 7
M. A tablespoonful every two hours.

Treatment of Locomotor Ataxia.

The most important consideration is, as a rule, rest in bed, which, if prolonged, often hinders the progress of the disease. In any case, undue fatigue or over-exertion should be avoided. The rest cure is eminently suited to this condition. The second great indication is good nursing and plenty of good rich food which contains very little fat. The third indication is frequent warm baths. The greatest benefit results from saline baths at a temperature of from 30 degrees to 32 degrees C. The bath should not, as a rule, last longer than fifteen minutes. Chills and sweating should be avoided and warm clothing should be worn. For individual symptoms, electricity, massage, narcotics, and analgesics are indicated.—*Indian Medical Record.*

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Newer Materia Medica.

Cases in Hæmatherapy From Sound View Hospital.

By T. J. Biggs, M. D., Stamford, Conn.

CASE I.—SKIN-GRAFTING WITH CALLUS SHAVINGS, IN BLOOD.

Mary M.; age 60 years; Irish. Diagnosis, ulcer of leg. Patient admitted to hospital March 3, 1902. She had a large varicose ulcer situated over the tibia, about 3½ by 2 inches. This condition had existed for nine years, and during that time in spite of all treatment employed had never entirely healed. It had been skin-grafted in the old way, three times unsuccessfully. At the time of entering the hospital the patient suffered so severely from pain that at times she would cry out. She was put to bed, secretions regulated, the ulcer cleaned up by means of a dermal curette, and dressed for the first twenty-four hours with a Thiersch pack. On the morning of March 5th, after the surface had been thoroughly cleaned up, a bovinine-pure pack was applied and kept wet with the bovinine for twenty-four hours.

On the morning of the 7th, I determined to employ grafts secured from a callus on the small toe, in order to demonstrate the technique of this mode of skin-grafting to five visiting physicians. The mode of procedure was as follows: The callus was thoroughly scrubbed up, and the external layers scraped off. Then thin sections of the layers next to the true skin were obtained by means of a very keen razor. Nine of these were deposited on the ulcerous surface. Over these were laid strips of perforated rubber tissue, then strips of plain bi-sterilized gauze saturated in bovinine, and a bandage applied. The nurse was instructed to keep the dressings wet with bovinine pure. This dressing was removed on the 14th, and it was found, much to the delight and astonishment of the visiting physicians, that out of the nine grafts employed eight were firmly adherent and in a healthy growing condition. The ninth had become displaced and was removed. The wound was now dressed with bovinine pure; the dressings being kept wet, and changed once in twenty-four hours. Coincident with the local dressings, from the outset, the patient had been given a wineglassful of bovinine in milk alternating with wine and beer every three hours. On March 24th, she was discharged cured, the entire surface having become covered with new, healthy skin.

This experiment has been employed frequently enough by me to demonstrate that where the technique is carefully followed it will in the majority of cases yield the most gratifying results. A point of interest in this case and a usual one, is that from the day of the first dressing of the bovinine up to the time the patient was discharged, she was relieved of all pain.

CASE II.—SKIN-GRAFTING WITH SKIN-SCRAPINGS, IN BLOOD.

Anna H.; age 12 years; American. Diagnosis, burn of right hand. Patient

was admitted to hospital March 8, 1902. As a result of the burn she had on the back of her hand an ulcerous surface 2 by 1¾ inches, very painful, and in spite of three months treatment had refused to heal. It was impossible in this case to secure skin-grafts, and as I wished to demonstrate to the visiting physicians who were present the efficacy of *skin scrapings* as a means of bringing about a rapid healing of small surfaces where grafts could not be obtained, with an ordinary vaccinating comb, I secured skin scrapings from the little patient's arms, legs and back. These were deposited within the periphery and dressed as in the other case. The dressing was kept wet with bovinine pure until the morning of the 16th, at which time it was removed and to the delight of the visiting physicians as before, the surface was found to be almost entirely healed, there remaining unhealed only a small space about the size of a 10-cent piece, in the center. The wound was now dressed with bovinine pure and the nurse ordered to change it every twenty-four hours. Internally the patient had been getting a teaspoonful of bovinine every two hours in peptonized milk. March 24th she was discharged cured.

CASE III.—SKIN-GRAFTS HEALED IN SIX DAYS, WITH BLOOD.

Arnold L., aged 24 years, German. Diagnosis, wound of the left cheek, the result of being thrown from a street car. Patient admitted to hospital March 10, 1902. The wound was filled with gravel and dirt, and involved almost the entire side of the face. A space in the center of the cheek 2 by 1¼ inches, was completely denuded of skin. In this case it being desirable to have the wound heal rapidly and with no evidence of scar, I determined to use grafts of normal skin sufficiently large to entirely cover the denuded surface. These grafts were secured from the patient's arms. The wound was dressed as in the other cases; the dressing being kept wet with bovinine. March 17th, the dressing was removed, and the wound was entirely healed, leaving no evidence of a scar whatever; but around the periphery there was some decided redness. This is probably the most rapid case of healing of this class on record.

CASE V.—GREAT 12-YEAR OLD ULCER HEALED WITH APPLIED BLOOD, WITHOUT SKIN-GRAFTING.

Mike L.; age 57, Irish. Diagnosis, ulcer of left leg. Admitted to hospital March 3, 1902. This condition was of about 12 years standing, and during that time had never entirely healed. He had been treated at various hospitals and at various clinics and by private physicians, but said that he got no special relief. The ulcer was a large one, situated in the calf of the leg, being 4 by 3¾ inches. It was covered with unhealthy granulations which exuded a foul-smelling purulent discharge. The surface of the ulcer was thoroughly cleaned up with a dermal curette, and dressed with a wet Thiersch pack. This was kept wet and not changed in twenty-four hours. At the end of the twenty-four hours this dressing was removed, the wound thoroughly cleansed with bovinine and hydrozone reaction, followed by Thiersch irrigation, and dressed with bovinine pure. The bovinine dressings were changed twice in twenty-four hours, and the patient got a wineglassful of bovinine internally, every three hours. March 23rd, the ulcer had healed with the exception of a small space at the upper periphery. This was touched up with a 25 per cent. solution of pyrozone, and dressed with

bovinine pure; the dressings being renewed twice in twenty-four hours. March 30th, the patient was discharged cured; the ulcer having become covered with healthy skin, and no scar tissue, it being almost impossible to tell it from the surrounding skin, the only difference being that it was a little redder.

CASE IV.—VIOLENT ENDOMETRITIS CURED BY APPLIED BLOOD, WITHOUT CURETTAGE.

Florence B., aged 30 years; American. Diagnosis, endometritis. Patient admitted to hospital March 2, 1902. She was greatly anæmic and emaciated. Was so weak that she had to be carried from the carriage to her bed. Discharge was so profuse that unless proper appliances were used it would run from her almost constantly.

This condition had existed for four years, and during that period she had twice curetted, but no result or relief obtained. Examination revealed the uterus to be in a highly diseased condition. So much so that I advocated a vaginal hysterectomy, or at least a thorough curettment. To these propositions both the patient and her friends absolutely declined to agree, and begged that I employ some other treatment. I therefore, without any promise of result, determined to employ bovinine injections and applications. On the 3rd of March, after the patient's secretions had been regulated, I commenced treatment by washing out the uterus and injecting a solution of bovinine and salt water, two-thirds bovinine and one-third salt water, and tamponing the vagina with bovinine pure. Internally she was given two teaspoonfuls of bovinine every hour in peptonized milk and a little water. The vaginal injections and tamponing were employed twice in twenty-four hours, up to March 14th. At this time the discharge had entirely ceased and the uterus was becoming smaller. The uterine washings now were employed once in twenty-four hours and, instead of bovinine tamponings, vaginal injections of the bovinine pue. Internally, the bovinine was increased to a wineglassful every two hours. March 18th, the patient was up, and went for a short walk, and returned in splendid condition. Had gained 4¾ pounds in weight. On March 23rd, the uterine injections were discontinued, and the vaginal injections employed once in twenty-four hours. At this time the uterus had assumed its normal size, and all evidence of inflammation had disappeared. The patient was looking and feeling splendidly. Therefore local treatment was discontinued. April 1st, she was discharged cured, but instructed to return at intervals for examination and continue the bovinine internally indefinitely.

This case was certainly an extreme one and by all gynæclogists an operation would have been deemed, I think, an absolute necessity.

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Warner's effervescent lithia water blets are likewise useful in Bright's sease, acting as a diuretic and reducg alburinuria. In this manner they revent the accumulation of toxic prodcts. It must be recognized, from ch considerations, briefly presented, at they possess a wide sphere of usefness.—*Monthly Cyclopedia of Practal Medicine.*

Its Distinctive Feature.

One needs but to review the physiogic activities of the remedies recommended as tonics and reconstructives to realize the fact that practically all of them have some secondary effects which detract from their clinical value. It may be that they irritate the stomach and thereby excite repulsion on the part of the patient or even induce nausea and vomiting; some of them are astringent, others primarily stimulating but secondarily depressing—and so on through the entire category of remedies, objections more or less serious may be found. It is, therefore, a matter of great importance to employ a remedy which is not only free from deleterious by an after-effects, but which adapts itself to use as a routine remedy in the many and diverse conditions that call for tonic and reconstructive medication.

The one remedy which many years of experience proves is entirely free from detrimental effects, is Gray's Glycerine Tonic. This preparation is of pleasant taste, agrees perfectly with rebellious and sensitive stomach, patients never tire of its continued administration, and it is extremely effective in restoring tone and vigor to the entire system.

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"Are You in Pain?"

You will probably ask this question more frequently than any other. Nothing appeals to one more strongly. To be able to relieve pain, whether it be a slight nervous headache or the most

excruciating suffering from a severe neuralgia, brings the height of pleasure to both patient and attendant. The ideal remedy must not only do its work, but it must also do it quickly. Touching this point is an article in the *Boston Medical and Surgical Reporter,* by Hugo Engel, A. M., M. D. The author says: "Antikamnia has become a favorite with many members of the profession. It is very reliable in all kinds of pain, and as quickly acting as a hypodermic injection of morphia. It is five grain tablet is administered at once; used only internally. To stop pain one ten minutes later the same dose is repeated, and if necessary, a third dose given ten minutes after the second. In 92 per cent of all cases it immediately stops the pain." Farther on, Dr. Engel compares Antikamnia with the other coal-tar derivatives. He says that while some of these are valuable remedies for the relief of pain, "not one of them is so certain in its effect in comparatively as small a dose and so prompt in giving relief as Antikamnia in every kind of pain." This uniformity in its action leads him to believe that Antikamnia possesses properties differing from the other coal-tar products, while it is certainly free from danger, if given anything like reasonable quantities, which is not the case with other products from coal-tar. Five grain Antikamnia tablets afford the most accurate and convenient form for administration.

Ecthol in Scarlet Fever.

By John M. Turk, M. D , Canton, Ga.

I feel called upon to say something plain and practical in regard to the usefulness of ecthol in the above disease. I have used ecthol for one year in an epidemic of scarlet fever, and I must say that it has more than met my most sanguine expectations. It has accomplished more than any agent I have ever used in a practice of forty-three years. Ecthol robs scarlet fever of all the distressing sequels, such as nephritis, ear complications, adenitis, membranous angina, etc., if the remedy is given early enough and as often as every two or three hours, in bad cases, until desquamation is over, then not so often. A great many of my cases were malignant and quite a number ushered in with conculsions. In some of my malignant cases I gave double the prescribed dose. It prevents in a large degree the disintegration of cellular tissue, and will not disappoint any who may use it in scarlet fever.—*New Orleans Medical and Surgical Journal, May, 1902.*

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W. E. Russell, M. D.

Wyatt, Texas.

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irritations and atonic sexual conditions. It is my sheet anchor in urethritis, cystitis and chronic prostatitis. I shall continue its use in cases where it is indicated, and also enlarge upon the field of its exhibition as circumstances may suggest. Sanmetto is all right.

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Sanmetto in Prostatitis, Enuresis, Catarrh of Bladder.

In prostatitis, enuresis, catarrh of bladder and all diseases of the genito-urinary system, Sanmetto has been indispensable to me.

J. T. W. KERNS, M. D.
Bellaire, Ohio.

I find Aletris Cordial to be an excellent and palatable preparation. I have used it in cases of dysmenorrhea, irritable ovary, uterine congestion, leucorrhea and endometritis, with the best of results. In a case of irritable ovary, that had resisted all treatment for four years, I prescribed Aletris Cordial, and after taking for four days, the pain was entirely relieved.—*T. R. Dice, M. D., Utica, Mo.*

Treatment of Hay Fever.

Means of relief for this distressing trouble are many and varied, but the evidence that adrenalin fully meets the indications as a remedial agent seems to be in the ascendency. It controls the nasal discharge, allays congestion of the mucous membrane, and in that manner reduces the swelling of the turbinal tissues. As the nasal obstruction disappears, natural breathing is materially aided and the ungovernable desire to sneeze is mitigated. Adrenalin blanches the mucous membrane by vigorously contracting the capillaries, and thus reduces local turgescence.

In the treatment of hay fever the solution of adrenalin chloride should be used. This preparation is supplied in the strength of one part adrenalin chloride to one thousand parts normal saline solution, and is preserved by the addition of 0.5 per cent. chloretone. The 1-1000 solution should be diluted by the addition of four parts normal salt solution and sprayed into the nares with a "cocaine" atomiser. In the office, the 1-1000 solution may be applied in full strength. A small pledget of cotton is wrapped about the end of an applicator and moistened with a few drops of the solution (1-1000), and the visible portions of the lower and middle turbinate bodies, and the ceptum, are carefully and thoroughly brushed. The same application is made to the other nostril, when usually relief follows in a few moments. Should the benefit prove only partial, the 1-5000 solution may now be sprayed into both nares, and a few drops instilled into both eyes. The effect of this treatment may be expected to last for several hours, one thorough application daily being sufficient to afford complete relief in many cases.

It is also recommended that solution adrenalin chloride be administered internally in 5 to 10 drop doses, beginning ten days to two weeks prior to the expected attack. In explanation of the

beneficial effect of the drug when used in this manner, the suggestion has been made that hay fever is essentially a neurosis, characterized by a local vasomotor paralysis, affecting the blood supply of the eyes, nose, face and pharynx, and occasionally of the laryngeal and bronchial mucous membranes. Adrenalin overcomes this condition, restores the normal balance in the local blood pressure, and thus aids in bringing about a cure.

Alcohol and Tuberculosis.

From the laboratory of Professor Maragliano, at Genoa, comes a conclusion which is in formal opposition to what has hitherto been known of the action of alcohol in tuberculosis. According to these experiments alcohol, far from being injurious, is useful in preventing the development of tuberculosis. Maragliano's opinion has grown out of some experiments undertaken for the purpose of determining the minimum quantity of serum necessary for neutralizing the action of Maragliano's tuberculin, which is a watery extract of tubercle culture. The investigator has found that the antitoxic power of the serum of alcoholics is much higher than that of other individuals.—*Medical Age.*

Borax and Boric Acid as Food Preservatives.

From their study and investigations of this subject, Victor C. Vaughan, M. D., and William H. Veenhoer (*Amer. Med.*, March 15, 1902) draw the following conclusions:

(1) The use of borax and boracic acid as preservatives in butter and cream is justified by both practical results and scientific experimentation. One-eighth of one per cent. of borax or boric acid delays the souring of cream at ordinary room temperature for about twenty-four hours, and when the preservative is increased to 0.25 per cent., another day elapses before souring takes place, and 0.5 per cent. will further delay the souring. (2) The and bacon which are to be transported dusting of the surfaces of hams and bacon which are to be transported long distances, with borax or boric acid, not exceeding 15 per cent. of the weight of the meat, is effective and not objectionable from a sanitary standpoint. (3) Meat thus dusted does not become slimy because the preservative prevents the growth of aerobic peptonizinz microorganism.—*Med. Times.*

The American, even the poorest, spends twice or thrice as much as he need or should upon his food. A capital illustration of this fact (*American Medicine* says) has been given of late in New York City, where a "one-cent restaurant" has been established, and has so far proved successful. A large bowl of pea soup, hominy or oats, etc., is served for one cent, and other things, coffee, bread and butter, beans, puddings, etc., at from three to five cents. A meat dinner for ten cents was offered, but proved unpopular. Any of the one-cent portions contain food elements sufficient to supply the nourishment required in a full meal. Two or three of these one-cent portions per day, if varied according to appetite, should maintain the weight, strength and health of an ordinary individual for an indefinite time, if such extreme economy is necessary.

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Sodium Hyposulphate	.11663	Flourine	(Fl)	.04665
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Calcium Carbonate	5.08299	Nitric Acid	(NO3)	.41406
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Iron (ferrous) Carbonate	.39715	Lime	(CaO)	13.43569
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Sodium Chloride	11.68057	Magnesia	(MgO)	2.77594
Sodium Bromide traces	.——	Iron	(FeO)	.24669
Sodium Iodide	.00122	Potash	(K2O)	.63333
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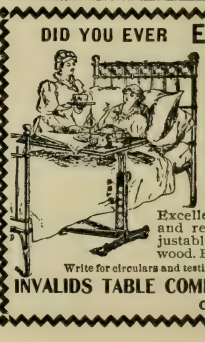

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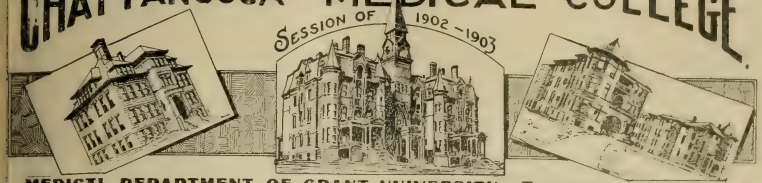

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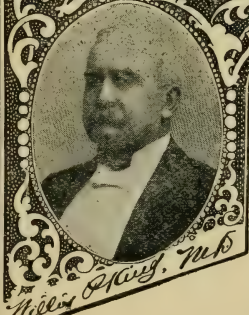

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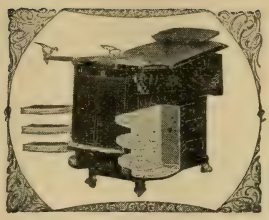

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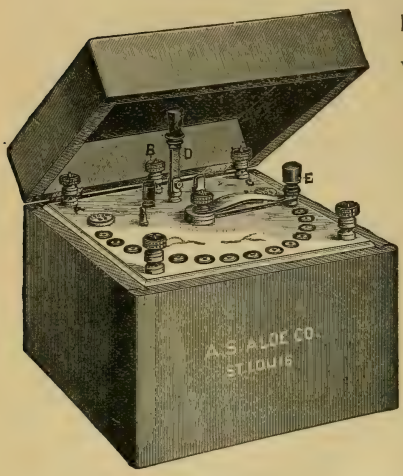

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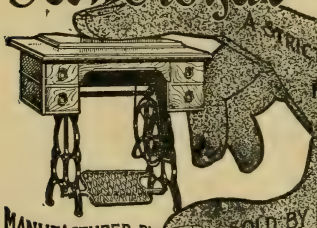

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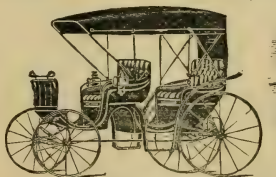

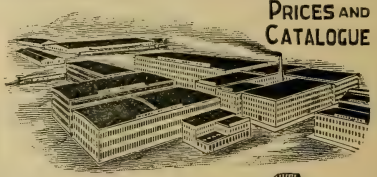

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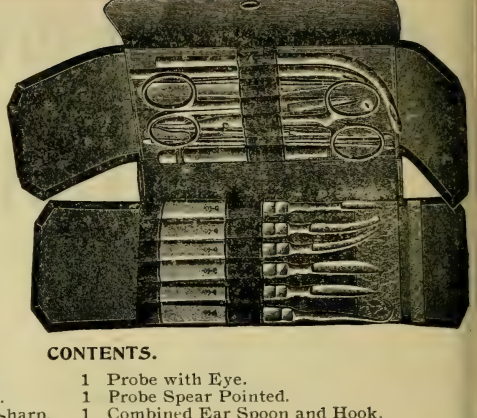

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The explanation is suggested that insanity in one of the age-marks of a race, for it is certain that what the world looks on as the newer races of men, such as negroes, because of their only recent remove, comparatively speaking, from the savage state, are not susceptible to mental disorders as the white race, which has run through so many different civilizations and crucial experiences.—*Medical Age.*

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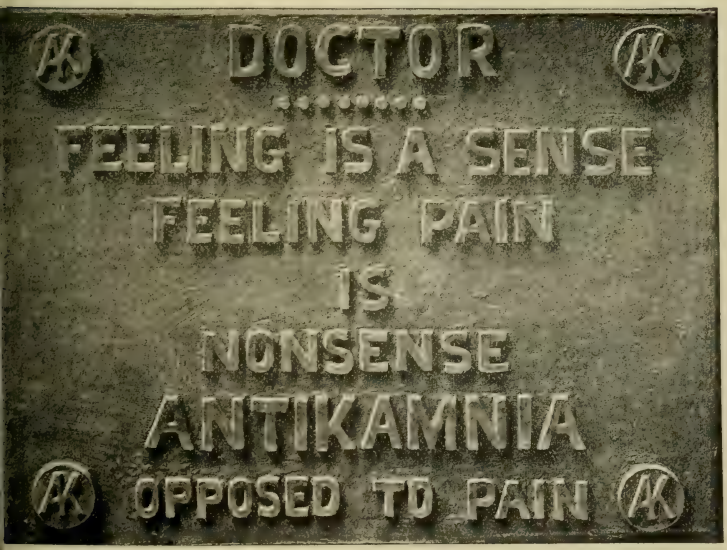

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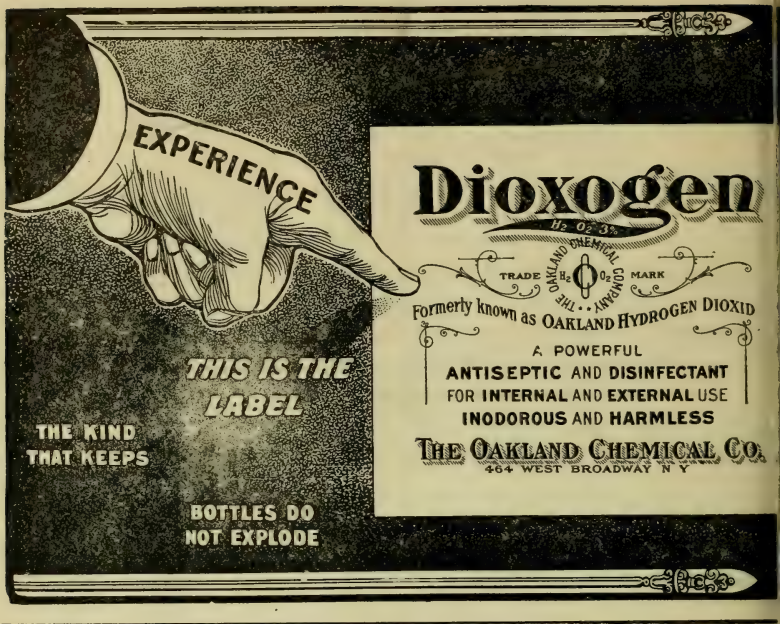

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EDITORIAL.

PROFESSOR VIRCHOW.

The world of medicine lost its reatest pathologist in the recent death Prof. Rudolph Virchow, of Berlin. e was born October 13, 1821, in hievelbein in Pomerania. from 1839 1843, he was a student of medicine Berlin; 1844 he was prosector under obert Froriep at the Royal Charite ospital; and after two years service was elevated to place of his renown- master.

In 1847 he and Bermo Remhardt unded Virchow's Archiv, a periodical voted to pathology and which is now nning in its 169 volume. In 1848 irchow made a study of a devastating idemic of typhus fever in upper Sile- a, and as a result strongly arraigned e governmental authorities for im- oper administration of sanitary affairs. He next founded a periodical, Medicinische Reform, which strongly advocated the establishment of a bureau of Public Hygiene. These advanced ideas and the part taken by him in the liberal revolutionary movements of 1848, led to his dismissal from his place in Berlin. He was at once called to the professorship of pathological anatomy in Wurzburg. In 1856 he was called to the chair of pathology in Royal University, Berlin, which position he held until his death.

Virchow created a new era in medicine by the promulgation of his cellular pathology as opposed to the old "humoral theory." As one of biographical sketches says, the famous phrase, "onenis cellula e cellula," sounded the death knell of the old humoral pathology and the birth of the new cellular pa-

thology which led to the study of the changes produced by disease in the constituent elements of the human organism.

Virchow did much to overthrow empericism in medical investigation, insisting that correct knowledge would come only by close clinical and post mortem study of individual cases, and that teachers of medicine should not be alone practitioners, but also observers and investigators. German investigations lead the world today by virtue of following this teaching of Virchow. He drew students to him from all parts of the world and sent forth many who are now masters of medical thought.

Virchow's versatile genius did not confine itself alone to the field of pathology. He became eminent as a writer on anthropology and archaeology. He has also been a decidedly prominent figure in the medical congresses of the past half century and was frequently chosen to deliver one of the leading general addresses.

In politics Virchow's was as wise and courageous as in medicine. He did much to systematize sanitary laws of Berlin. He often met the great chancellor, Bismarck, in debate in the Reichstag. Their views were so antagonistic that Bismarck once challenged Virchow to a duel. He maintained that medicine and sociology were closely related. He reiterated again and again "that medicine and political legislation must be brought into the closest relationship if practical medicine is to exercise the influence it should upon the important problems in the life of mankind." A lesson which the world is slowly, but surely, learning.

Broad-hearted and catholic-minded, he refused to return the decoration conferred upon him by the French on account of his wide scientific research maintaining that science seeks truth and knows no geographical boundary or racial prejudice. Virchow was a man much beloved by the common people, a fact which he was more proud of and which gave him more comfort in his old age, than the admiration bestowed upon him by the rulers and scholars of that world.

The mind of man does not often compass two epochs. Vichow did not fall in with the era of bacteriological investigation, in which we now live. The master medical mind of the past century has ceased activity.

X-RAY TREATMENT OF CANCER.

The treatment of cancer by application of Roentgen ray is attracting the attention of investigators in some of the leading medical centers of the country.

While thus far not having proved as curative in tubercular conditions as many were led to expect, still there are those who believe that its employment in this field will be beneficial.

Applied to malignant growths, the X-Ray, if we are to believe recent reports, exerts a selective action on the pathogenic cells and at the same time does not seriously impair the vitality of nomal tissue cells. The writer was told by an X-ray expert that in several cases of facial epetheliomata, to which he was asked to make the application, that there began after a few sittings a gradual drying up and shrinkage of the malignant tissue rather than a sloughing process, looking as though the unhealthy cells were dissolving away and leaving healthy. There was perhaps too much enthusiasm on the part of the narrator who thought a practical physi-

ist was not a physician. The above emarks would not apply to those rowths in which the sloughing had egun in this stage. It is claimed that ie discharge, offensive odor, gradually ields. This is a palliative effect much esired in the far advanced cases.

This treatment should be applied by ie well-trained X-ray operator, be- use of the danger of dermatitis which sets up by errors in technique and hich is often very stubborn to control. his is an era of fads, but let us hope at the X-ray may prove curative in ie treatment of cancerous growths.

RE THE PRESENT METHODS OF FUMIGATING EFFECTIVE?

Modern sanitary science has done uch in recent years to curtail the rav- ges of disease, but there yet remains ry much to be done. The problem effective fumigation is one of the ost difficult which confronts the san- arian. G. E. Pfahler, of Philadelphia, recent experiments shows that sul- ur and formaldehide come nearest lfilling the requirements as antisep- s. In fumigation we want an agent hich will promptly penetrate every rt of the room, destroy bacteria, not jure other material with which it mes in contact and at same time be sy of application and not too expen- ve.

One investigator (Flugge) says that esh and undried sputum and diph- eretic membrane are not penetrated formaldehyde; the inner side of iled clothing, excreta in form of ales and dried dust; the deeper parts bedding, articles in pockets, hand- rchiefs, etc., are not disinfected by it. yphoid and diphtheria bacilli were t killed when placed between two ers of blankets.

By sulphur fumigation, 3 pounds to 1,000 cubic feet and exposed 20 hours, no pathogenic germs were killed except those of diphtheria. Three times the usual amounts of both sulphur and formaldehyde were used in other experiments with like results.

The lesson to be drawn from the researches are that we must rely not so much on fumigation, but more upon destruction by fire of infected material. During illness of patients we must see that all discharges are promptly made away with so that the contamination by these infectious material will not be so extensive. Burn all you can afford to burn; use boiling water on all articles which it will not injure and leave the rest to fumigation. Use present methods until more effectual ones are found.

TYPHOID FEVER IN LARGE CITIES.

We are told over and over again that typhoid fever is a preventable disease and could be easily eradicated if the proper precautions were systematically and conscientiously carried out. That this is at least relatively true, seems to find a practical demonstration in the history of many of the large cities of Europe and to a much less degree in some of our American cities. It seems, however, that either our municipal authorities are woefully behind modern knowledge in preventive medicine, or our system of municipal government is in this respect very inferior to that of many foreign cities.

The comparison between the typhoid morbidity of New York and Berlin for instance has become trite. There are undoubtedly many things yet to be learned in regard to the conveyance and susceptibility to typhoid fever—the scourge of many otherwise salubrious localities—but it does seem that we

should be able to accomplish the same degree of extermination that has been obtained in older and more densely inhabited countries. The health reports from many of the large centers of population for August and September show in many cases an actual increase of sickness from this cause over the statistics of previous years. There is a typical epidemic in Chicago, the mortality for one week in the latter month being 55 deaths, with a gradual decline for the succeeding weeks of that month. During the week above referred to, there were in the Cook County Hospital alone 373 cases. The gradual decline is not attributed to improved water supply, but to the campaign of education undertaken by the Board of Health, as to the cause, nature and prevention of the disease. It may be stated in passing that our own Board of Health has been doing some good work along this line and that with the co-operation of the physicians of the State much more may be accomplished.

The same report as to the prevalence of typhoid fever is found in the reports from New York, Baltimore and Philadelphia. In the first named city the new cases reported during September average something over 200 per week, which is a substantial increase over the records of the previous two years.

FRACTURES AND THE RESPONSIBILITY OF PHYSICIANS.

In all probability the majority of suits against physicians for malpractice are in connection with fractures. The reasons for this are not far to seek. A badly set fracture is a poor, but permanent advertisement for the doctor, and scores of years afterwards the patient may hold up a deformed limb as evidence of how little Dr. Blank knew of bone-setting. The disfigurement and lack of function is ever before the public and in case of suit has due effect upon the jury. Then again, many otherwise good physicians, from distaste to this branch of practice or want of mechanical ingenuity, show very poor judgment in the management of fractures. Most of us have seen cases in which the original injury would have been less destructive of function and symmetry had no treatment been instituted. These are extreme cases, of course, but are a sad commentary upon the incompetency of carelessness of the physician in charge—always provided the patient was willing to follow directions and co-operate in the treatment. The plaster-paris dressing in the hands of the unexperienced and ignorant has been responsible for some fearful results. Applied improperly as to time and manner, extensive sloughing and even gangrene has resulted. The inexperienced should employ the simplest dressings and make frequent inspections.

Dr. John A. Lewis, in a recent paper, gives the following excellent advice:

"1. Do not undertake to practice surgery unless you have some training and skill. 2. If you undertake it, leave nothing undone to secure success, from the date of your first visit to your last, when you remove the dressing. Never guarantee results; let it be clearly understood that failure is not impossible even in uncomplicated cases after the most faithful and skilful treatment. 4. Make your first examination just as carefully and thoroughly as possible under the circumstances; make a plain and truthful statement as to result of your examination of trying nature of injury, etc., to the family, guarding your prognosis well. Make this state-

nent if possible in the presence of some nonest physician or, better still, some ntelligent layman. 5. Let the patient nd his family feel that in calling you t is presupposed that they know your bility in work in this line; if they are nwilling to assume the risk of final esults, then they ought to call some ne else. 6. After your first examinaion, if you are in doubt as to the diagosis, or as to plan of treatment, call a onsulting physician at once. 7. In the reatment of charity patients and deadeats be especially on guard to protect ourself. 8. Remember the law holds ou to the same accountability in the reatment of charity patients as in treatent of the rich. 9. Use only approved methods of treatment, leave the xperimental treatment to the hospials. 10. Treat your brother physician xactly as you would have him treat ou; never by word, or act, or look, nd countenance to the suggestion of damage suit, it matters not whether e physician be your personal friend r not. Express no opinion as to an nsuccessful result in any case treated y another physician, unless he be presnt. 11. If in spite of your best efforts avoid a suit, one comes, never comromise or pay hush money; fight to the eath. Every physician should always and ready to go to the assistance of s brother physician, with his time and oney if necessary, in defending one these suits for malpractice. 12. In osing, it may not be out of place for e to say that perhaps the wisest solun of the whole matter might be for ch of you to 'lay up treasures in aven, where moth and rust do not rrupt and thieves do not break rough and steal.'"

As regards the final admonition, it can be said with much truth that the majority of our profession manage to avoid any great accumulation of treasure on earth, and it is hoped that they have been equally careful to deposit it elsewhere.

Dr. Henry Leffman, of Philadelphia, has an article in the Philadelphia *Medical Journal* upon the sanitation of Atlantic City. The article will be read with interest by the increasingly large number of visitors to that famous resort. Dr. Leffman very truly remarks that considered in all respects, Atlantic City is the greatest of American summer resorts, with a population of some 175,000 people during the height of the season. It is therefore with some surprise that we learn from this article the relatively primitive sanitary regulations. This seems from Dr. Leffman's communication especially true of part of the water supply, which is collected in surface reservoirs unprotected from surface contamination. The public water supply is unfiltered, but despite this, the city is free from general sickness and such diseases as typhoid fever are infrequent. This is in part attributed to the fact that many of the large hotels have private water supplies from artesian wells of excellent quality, and also to the fact that a majority of the visitors are from such cities as Philadelphia, New York, Baltimore, etc., having polluted water, and therefore the residents may be considered as to a large degree immune. He however, takes occasion to add a warning that the present absence of sickness is liable, under existing sanitary arrangements, to be followed at any time by an epidemic of infectious diseases.

The Carolina Medical Journal.

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ORIGINAL COMMUNICATIONS.

Appendicitis from the Standpoint of a General Practitioner.*

By Dr. B. L. Hillsman, Richmond, Va.

This subject has been selected, not so much to call attention to its importance, or that I have discovered a method of differential diagnosis between its several forms, but in the hope that its discussion may lead to a concerted plan of treatment and in so doing, decrease the present mortality.

I will not go into the symptoms, diagnosis and prognosis in full, but just so far as to allow me to deal with its treatment in an intelligent and practical manner.

Appendicitis is an inflammation primarily involving the vermiform appendix, frequently complicated by ulceration ,perforation, grangrene and pus formation. We divide it into catarrhal, suppurative, gangrenous, etc., and as a cause for each form ,we claim microbic cause for each form we claim microbic infection which takes place after irritation or devitalization, produced by hardened fecal masses, foreign bodies, trumatism or inference with the blood supply.

The cardinal symptoms are pain, tenderness and rigidity. Deaver says these three symptoms present a picture in 90 per cent. of cases that cannot be mistaken. We have in typhoid fever extra uterine pregnancy, cholecystitis and acute mechanical obstruction, the same set of symptoms, but with proper care and a correct history, the diagnosis can be made. The pain in appendicitis is sudden in onset, may be localized to either iliac fossa, or may radiate to the umbilicus, testicles or epigastrium. Tenderness is usually localized in the right iliac fossa. Pressure made on other parts of the abdomen

*Read before the Richmond Academy of Medicine and Surgery.

licits tenderness, not over the point where pressure is made, but at McBurney's point. Rigidity of the right rectus muscle is always present, though at times it can only be demonstrated by a delicate touch.

Nausea and vomiting are usually present, but do not give any information as to the severity of the attack. The pulse is usually accelerated, with slight rise of temperature, but this is not always the case. Both may range high. There may be diarrhoea or constipation, but constipation is the rule.

The diagnosis of appendicitis can be made from the symptoms enumerated; but what we want is a method of differential diagnosis between the mild and the severe types, the operative and the non-operative. Have we any? I say, no. The clinical thermometer, our hand by in other diseases, tells us nothing. Morris (Med. Record) says the temperature is a matter of no consequence as giving a clue to the condition of the appendix. The pulse is uncertain. Palpitation, percussion, auscultation are worthless. Of course, in 48 to 72 hours, we can make the diagnostication, but very often in that time the patient has passed from your hands to the undertaker, and we comfort the friends by saying that everything was done for their relative that medical skill could do; that it was a bad case from the first, and surgery could not have done any good. This, my fellow practitioners, eases your conscience a little and retained the family to you as patrons; but if the truth were known, you in your own conscience know that had a surgeon been called as soon as you made your diagnosis, that your patient could have been saved. You inwardly reasure yourself; but I claim, gentlemen, that you should be censured by the public and your profession for robbing your patient of the best means known to science of saving life in this treacherous malady.

Treatment. With our present methods or knowledge of the differential diagnosis between the mild and severe cases, there is absolutely no medicinal treatment for appendicitis. In my experience of about five years in the practice of medicine, it has been my fortune to attend about forty cases of appendicitis, either in my own practice or in consultation with my father; and I always will regret that I gave any of those cases a single dose of medicine. It is true that about thirty recovered with medical treatment. Then were operated on, with five deaths; but I firmly believe that, considering the splendid condition of the forty cases when first seen, immediate operation would have given a mortality of less than one per cent. Give me a method of diagnosing the mild from the severe form, and I will change my opinion; but until you do, I say operate on every case as soon as you make your diagnosis. You see one case with a pulse of 110, temperature of 103 degrees, and treat medically, and recovery follows; another with a pulse of 90, temperature 99 degrees, and treat in the same way, and he dies; another type where you find a small, tender spot as the only symptom, and you operate and find a pint of pus. Such a case is reported.

Let me give you a few opinions as regards differentiating the several forms:

White (*British Med. Journal*): "At present, the symptoms of a mild catarrhal appendicitis cannot, with certainty, be distinguished from those marking the onset of the gravest type."

Syms (*N. Y. Medical Journal*): "No fixed rule can be laid down for deciding in the early stages, between the mild and the severe cases."

Shrady (*N. Y. Medical Journal*): "Danger may exist without being shown by pulse or temperature."

Richardson (*Amer. Jour. Sciences*): "Recovery may follow a temperature of 105 degrees, and death may occur with nearly a normal temperature."

Now with the above facts, we are in the dark as regards our prognosis when we are called to a case, and with the very small mortality (practically less than 1 per cent. if operation is performed inside of the first twelve hours). I say operate at once in all cases and you will save not only the cases that would have gotten well with medical treatment, but those that would have died with it. I know it will be opposed by some for the position I have taken, but I believe that all authorities will very soon come to the same conclusion, unless we find a method of differentiating the several forms. To those who will report a series of ten or fifteen cases treated medically without a death, I will say that mother nature has been very kind to them. Here are some of the conclusions of eminent men.

Carstens (*N. Y. Med. Journal*): "The conservative treatment of appendicitis consists in prompt operation. The starvation method of procrastination is viscious and has cost many lives."

Davie (*Dom. Med. Monthly*): "Early operation in abscess cases means small abscess easily and safely dealt with. Early operation in non-perforating cases means avoiding all sorts of catastrophies to the patient, as perforation, gangrene, etc., and recurrence at inopportune times. Early operation means in short, successful operations; delay means uncertainty and brings surgery into disrepute. The ideal time to operate to obtain ideal results, is in the stage of appendicular colic."

Deaver: "The sooner the appendix is out, the better for the subsequent welfare of the patient."

Murphy (*Amer. Medico.-Surg. Bulletin*, 1896): "I am satisfied there are some cases which can be cured by medicine, but the question is, can they be differentiated? By medical treatment with a mortality of 10 per cent. and 3 per cent. with the knife, should we not save the other 7 per cent. by early operation?"

Price (*Jour. Amer. Med. Asso.*): "If we made it a practice to operate when the trouble is first recognized, without delay of a day of more for consultations and therapeutical treatment, the deaths would be very few. The so-called very 'conservative' man gives us the ugly abscess class of cases and the virulent perforative cases."

Crutcher: "A rapid pulse and high temperature favor the destructive process; their absence is no assurance of recovery."

Morris reports a series of one hundred cases operated on with a mortality of 2 per cent., and in this series there were thirty abscess cases, gangrene, perforation, etc., and claims that twenty-eight per cent. would have died if they had been treated medicinally and at this, allows a recovery of twenty-three of the abscess cases.

In conclusion I will say, first, that it is better to operate prematurely than to wait until the patient is practically moribund. Second, we cannot anticipate the severe forms and so cull them out and operate only on them alone; we have no method of telling the ca-

tarrhal cases from the pus and gangrenous cases, and until we can, it is safer in every case to operate at once before the last named conditions have time to assert themselves. Third, I acknowledge a recovery of from forty to sixty per cent. of all cases without operative intervention, but we are unable to say which case is going to help make this percentage, and with a mortality of less than one per cent. if immediate operation is resorted to against an acknowledged twenty-eight per cent. without it, it certainly seems sensible to operate at once on every case.

Abortion of Gonorrheal Ophthalmia.

By Warwick M. Cogwill, M. D., Paducah, Kentucky.

With the baneful effects of the ubiquitous gonococcus always before us, it is not necessary to speak of the importance of our ever being on the alert to thwart its destructive career; nor is it necessary, to enlist your interest, to go into statistics to show the large number who dwell in darkness, and whose blindness can be traced directly to the action of the gonococcus.

The prevention of ophahtlmia neonatorum by Crede's method is so established by large statistics, that its efficacy is beyond dispute. Dr. Lucien Howe* cites statistics by Kostling showing that in 17,000 births where no prophylactic treatment had been employed some trace of ophthalmia developed in over 9 per cent., whereas in 24,000 children treated by Crede's method, the number who developed the disease was only one-half of one per cent.

Now it is also probably true that a large per cent. of the cases of ophthalmia neonatorum are due to infection of the conjunctiva by gonococci; hence it would follow that in preventing this disease, in a certain percentage of the cases, it is done by killing gonococci that are present, but have not yet attacked the conjunctiva.

Now if it is possible to carry this procedure one step further, and abort gonorrheal ophthalmia in its earlier stages, it would save many eyes.

The abortion of gonorrhea of the urethra has been a subject of discussion for many years. Its attempt has been advocated and condemned, condemned and advocated. The pendulum has swung through all its phases. At present, from what I can learn, those in genito-urinary practice condemn attempts at aborting this disease in the urethra.

As to aborting gonorrheal ophthalmia, I have seen nothing of it in ophthalmia literature; on the contrary teaching has been directly opposed to the use, in the incipient stages of gonorrheal ophthalmia, of any remedial agent in sufficient strength from which we might expect abortive action. Especially is this true of that most active or germicides silver nitrate. But the older views in medicine are sometimes changed in the light of modern etiology, and the later advances in therapeutis. It is possible that such may be the case in regard to the present subject.

This idea was suggested to me by a little experience in my own practice, an experience so meagre that it lends only to the suggestion of a possibility. I remember full well the old adage that it takes more than on swallow to make a summer; I am fully aware of the broad foundation that facts must be reared upon; yet the results I refer to impress me so favorably that I dare to

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*Philadelphia Medical Journal, January 18th, 1902.

present them to you. I will report two cases:

Case 1. J. S., (colored), employe of the Illinois Central Railway. There was profuse suppuration of the left eye, with great injection and chemosis, no corneal implication. Patient said the eye had been affected several days. The appearance of the eye was that of a typical case of gonorrheal ophthalmia. Patient also had at the time a urethral discharge. There was marked conjunctivities with slight mucoid discharge of the right eye which had commenced, according to the statement of the patient, the day before.

The treatment instituted was instillation of a 20 per cent. solution of protargol every four hours, with almost continuous bathing of the eyes with cold (iced) water.

The blenorrhea-gonorrhea, for which I took it to be in its incipient stage, affecting the right eye, subsided promptly, and the eye was free from redness and secretion in four or five days. The inflammation and suppuration gradually subsided in the left eye (the one first affected and in which there was a fully developed case of gonorrheal ophthalmia), and the patient was discharged well in two weeks.

Case 2. Mr. W. A. S., aged 21 years, employe of the Illinois Central Railway, referred to me December 20, 1901. His right eye was very much inflamed, with purulent secretion. The eye had been affected two or three days. Patient had urethral gonorrhea at the time. The diagnosis was gonorrheal ophthalmia of the right eye. The left eye was not inflamed.

I placed a Buller shield over the left eye and instituted the following treatment: Almost constant cleansing of the right eye with boric acid solution; iced cloths for twenty minutes each hour, and instillation of a 20 per cent. solution of protargol every four hours. On the following day when I saw the patient at the hospital, some twenty-four hours after I first saw him, the left eye, the one that appeared well the day before, was injected and gummed up with mucoid discharge. I believed it to be gonorrheal infection of the left eye, not the gumming up of the eye that we find when an eye is under a shield, so I removed the shield and had the same treatment applied to that eye as to the right eye, viz., cleansing, iced cloths, and solution protargol 20 per cent.

In four days the left eye was well; the inflammation and suppuration rapidly decreased in the right eye, and on December 31st, eleven days after treatment was commenced, the patient was discharged well.

I know that to have made my diagnosis absolute, I should have had a microscopical demonstration of the presence of gonococci in the secretion from these eyes. In the absence of verification, I report the above two cases only, for I fully believe, as in each case there was present a disease of the urethra which had all the appearances and history of being gonorrheal, that the eye trouble was gonorrheal, and that the implication of the second eye, in each case, was gonorrheal, and by timely and efficient treatment the disease in these two eyes was cut short—aborted.

If, then, it be true that gonorrheal ophthalmia can be aborted, if seen in its incipiency, by the use of an efficient remedial agent, would it not be wise to begin treatment in all suspicious cases in the abscence of microscopical findings, with a germicide of such strength

that should the suspicion of gonorrhea prove true, there is a possibility of checking the disease?

As to remedial agents: I would not advise the indiscriminate use of solutions of the nitrate of silver; but since we have in protargol an innocuous and non-caustic agent of high germicidal power, and it is claimed the property of penetrating tissues deeper than agents like silver nitrate, or bichloride of mercury, that exert but superficial action on account of their coagulability; an agent that can be put into the hands of the patient with safety, I would advocate the use of this agent in efficient strength, from 20 to 30 per cent. solution, to be used from five to six times a day in every case of blenorrhea seen in its incipiency, where there is the slightest suspicion of gonorrheal infection, and give the patient the benefit of the doubt.

The Doctor, the Patient, and the Importance of Good Roads to Both.

By Dr. M. Eugene Street, of Glendon, N. C.

Mr. President:

We have this year seen great interest manifested in road improvement. At the Good Roads Congress held at Raleigh in February, the whole State was represented, and the delegation was composed of that class of men who do something. Those men were not there for fun, but they had laid aside their business and gone to that congress to do something for the further development of the State.

Enough had already been done in the State in the way of road building to prove the great value of good roads. The amount of freight and produce that can be hauled over good roads in a given time is so much greater than what can be hauled over our average roads, that thinking men have made this great effort to wake up the people to their interest. The great importance of good roads to the medical profession in North Carolina enjoins upon us the duty of doing all we can to assist this movement, both collectively and individually.

It is neither practicable nor desirable that we here discuss all the benefits to be derived from good roads, so we will take up only some that are of greatest interest to us in pursuing our calling.

Perhaps the one of greatest interest and importance to the doctor is the time to be saved. The city doctor can get around to his calls with a dispatch that is satisfactory, both to his patients and to himself; but the case with the average country doctor going over the average roads is unsatisfactory—both to his patients and to himself, for it requires too long for the patient to have to wait, and the doctor has to spend too much of his time on the road. The average country doctor is a man of ability. He is also a medical student, and many are the problems he has to work out for himself. He soon learns the lesson of self-reliance, and if he runs across something he doesn't understand he usually knows where to look for the desired knowledge, and forthwith proceeds to consult his books and inform himself, if he has the necessary books and the time for it. But he has not sufficient time to systematically, and satisfactorily pursue his studies.

He takes several good medical journals, but he dosen't have time to read all the good articles in them. He must just look over them and select, and read such articles as have a practical bearing on the cases he has on hand, promising

himself that he will read what he knows are worth reading when he gets more time. He may get time to review his jounals, but the chances are that he will not. He doesn't always have so many patients on hand, but he does continually have to spend most of his time on the road and the most of the road is bad.

In not a few instances about the time he reaches the most efficient period of his professional career he suddenly and sorrowfully realizes that the unnecessary wear and tear of bad roads has so sapped his vitality that he is hopelessly becoming an old man, physically, regardless of the number of his days; for it is a physiological law that the changes wrought by age are as unalterable as the date of one's birth. He soon finds that he cannot continue the practice of medicine with his wonted celerity and powers of physical indurance. He tries sooner and sooner, and it takes longer and longer for the recuperation of his strength. Then his patrons begin to notice it and in a little while they see they cannot depend on getting him in cases of emergency, in the night nor in bad weather, and they say: "We will have to do without Dr. A. after a little while any way; his health is failing fast and we would as well begin to try Dr. Blank." And one by one they drop away. And it is sad, indeed, to see the doctor who has borne the heat and burden of the day, and the darkness and cold of the night, and the rocks and hills and gullies and sand of the roads thus dropped by his patrons before he is old enough to be retired—and all because of bad roads. He doesn't enjoy those changed relations, and it is a mistake to think it is all because of pecuniary interest that he disapproves it; for he has always done all he could for every one who appealed to him until it has become a fixed habit and his second nature to do all he can for all men when appealed to, or when suffering, or distress comes under his observation regardless of its nature.

In the goodness of his great big heart he is afraid that the sympathy and interest will not be felt, and that the care and skill will not be exercised in the examination and the diagnosis, and that the careful selection of therapeutics will not be as it should; and for those reasons the patient needlessly suffers or fills an untimely grave, and he is distressed.

We see all around us doctors old before their time, and it is no exaggeration to say, that it is only a question of short time before many of the vigorous men of our ranks today will furnish additional illustrations of noble careers sacrificed on account of bad roads. So for self preservation we must do all we can for goods roads.

Sooner or later almost every one gets sick. Often very suuddenly and violently. The first thought is the doctor, and the first act is starting a message or messenger for the doctor. The doctor starts as soon as possible after receiving the message, and goes as fast as the condition of the road will admit; but the average condition of our roads require twice, if not three times the length of time for him to reach his patient that would be taken up on good roads. What happens while this wearisome waste of time is going on? Ordinarily nothing much but loss of time, and much additional and unnecessary suffering for the patient. Occasionally, however, the result is more serious for the patient and the patient's family. In case of "hemorrhage," "eclampsia," "pernicious malaria," and a number of other troubles, while the doctor is going

over the road to the patient's house, the patient has sometimes taken the road from the patient's house—that road back over which none ever return.

Almost all these cases are amenable to treatment, provided it be properly applied in time. No man knows how soon some of these things may happen to himself, or some member of his family and pale death arrives ahead of the doctor, while the doctor is making the very best time he can over bad roads. Then while a man has the privilege to oppose and vote against good roads, he has no right to do so.

How different the case in emergencies when the doctor arrives quickly! For illustration, take a case of pernicious malaria. The patient always dies from this malignant disease if help is not obtained in time, but always gets well if properly treated in time.

Another thing worth considering is, that the great pecuniary advantage of good roads enables the doctor to make much better collections.

The doctor who has to spend most of his time on bad roads has very little time to attend to collections, and it is a well known fact in the business world, that if you neglect to look after your accounts, even honest men will neglect to pay them, and dishonest will not pay them. Under such conditions the doctor has neither the money to get the best new books and the best journals, nor the time to read them if he had them. So in the long run the patient is the greatest sufferer. So let us have good roads so that the doctor will not only have just a little time to read, but time to collect what he makes and get more books and journals, and to read a great deal more, qualifying himself much better and thus giving his patients much better service. Then in the long run the patient will receive the greatest benefit. But this was not intended for a long paper, nor for an enumeration of all the benefits of good roads—not even those of most importance to the doctor and the patient. We have too many other questions of greatest importance to discuss in our limited time.

Let us all go into the campaign now on for good roads, and give the movement all the support we can. Let us talk good roads, and encourage all others who do so to get everybody else to do the same, to think the same, and then the people will act and we will have good roads. The press of our State, the strong lever of progress, is doing a great work for good roads. Once the people come to think about it right, and see the great advantage and value of good roads, they are going to have them.

But there is one more reason to be given why we should have good roads, and it is placed last for the sake of emphasis. We have talked about self preservation, but there is another for whose sake we should exert ourselves to the utmost for good roads, the noblest and bravest of our noble and brave women —the doctor's wife. God bless her! Very few physicians marry until after they begin the practice of medicine, and this good woman understands from the beginning that she is to be deprived of her husband's society, help and protection almost all the time. She knows that she will not and cannot interfere with her husband's going forth at all hours of the day and night for the relief of suffering humanity.

She knows beforehand that for her there must necessarily be many long lonely hours both by day and by night; and that her husband is to be almost

always away; a very great responsibility rests with her alone in the proper management and bringing up of the family.

It is well known that a sufficient amount of rest and sleep is necessary for the preservation of health and beauty. The physician explains all this to his wife, and entreats her to not sit up and wait for him, as the time of his getting home at night is necessarily very uncertain. She agrees to this very readily, but we all know that times without number when we come in late at night, tired, hungry and cold, and sometimes very much discouraged, there is a sweet face and a bright smile to welcome and cheer us, a good fire to warm us and a warm supper to restore us.

We cannot approve much of this, but we do appreciate it, and this we cannot conceal, and for this reason it is in vain that we remonstrate.

So what can we do? Why let us have good roads, and then we can make our rounds and get home in time for supper, ordinarily. Then after supper we can sit down and talk and read with her, and she will be happier, and we will be better men and better physicians and the diseases of our patients will puzzle us less, and more of them will get well, and they will get well quicker, and even the doctor's life will be worth living.

Report of Treatment of Cases of Neurasthenia.*

By T. W. Keown, M. D., St. Agnes Hospital.

In reporting these cases which are so common among us, and which are found in all stations of life, I only do so in order to call attention to what seemed to me a determined causal factor in the majority of these cases.

As you know, neurasthenia, nervousness and nervous prostration may be regarded as the same disease and in Europe it is frequently called the "American disease," owing to the amount of overwork that Americans seem to do, and their constant desire to "hustle." Its chief symptoms are the tired feeling, headache, restlessness, disturbed sleep, irritability of temper, vague pains, and various degrees of sensation. These symptoms are generally associated with some disturbance of the alimentary canal either in the form of gastric or intestinal indigestion, combined with constipation.

According to the best authorities this indigestion usually precedes the neurasthenia and although there are many other causes such as valvular heart disease, eye-strain, drug-habit, etc., yet these disturbances of digestion present themselves so frequently it behooves us to be always on the alert for them—sometimes they are complained of and sometimes they apparently give no trouble, yet when looked for they are usually found—they present no distinct type and may be cases of anacidity, subacidity, hyperacidity or hyperchlorhydia. The neurasthenia must be treated from the standpoint of removal of the cause and the amelioration of the prominent symptoms. To do this we must quiet the nervous system and improve the digestion by appropriate treatment. Rest, with plenty of sleep, this means rest in bed if possible and sleep to be induced by the many simple remedies at hand, such as warm drinks, hot baths, cold sitz-baths, or if these fail, recourse may be had to drugs, though this is to be avoided and the correction of the

*Read before the Baltimore Medical and Surgical Association.

digestion depended upon to bring the body into a condition of repose. For this purpose a little soda—a simple laxative—a carminative, etc., may be sufficient. Usually in these cases I give a test meal and then drawing the contents of the stomach, making analysis of the same, one can readily recognize the existing condition of things and apply treatment.

The following cases:

Case 1. A young man, occupation teacher, age 28. Suffering for over two years; been treated by several eminent men, complained of being constantly tired, no desire for work, inability to fix his attention on his work, drowsy, headache and a consciousness of every part of his body being indisposed; fairly well nourished, somewhat sluggish capillary circulation, no valvular lesion, coated tongue. Gave test meals as follows: No. 1 at 8 a. m, soft boiled egg, one small plate of rice, a piece of rare meat well scraped, and a glass of milk, followed in four hours by Ewalds test—the roll of bread and cup of weak tea—contents were drawn one hour after second meal. In this case there was some egg, some meat and rice and nearly all of the second meal found in the contents, and all bathed in thick mucus. No free H. C. L. and very low degree of acidity. The treatment consisted in giving a mixture of iodine and calcium chloride to dissolve mucus before meals and twenty drops of H. C. L. dilute one-half hour and one hour after meals. I also gave him Nanheim baths to improve his general circulation. The results were very satisfactory. In two months he felt himself again, declared he could pitch a game of base ball as well as ever, went back to his work and continues in good health.

Case 2. A student found that his work was falling behind and that he could no longer study without getting a headache; also complained of great weariness. A diagnosis of neurasthenia had been made previous to coming to me. Examination revealed nothing, eyesight had been corrected, some days well in the morning and again on other days in the evening, headache being the chief complaint. Patient had a good appetite, was well nourished and looked in good physical condition; suspected malaria, but subsequent treatment of no avail. Ordered bath to improve heart tone; showed some improvement. Finally tested his stomach digestion; it showed subacidity. I simply supplied the much needed acid and at once he got well and returned to his studies.

Case 3. Another student, muscular frame, no spare flesh, Oct. 31. Visited Germany, was treated there for the same trouble, and now complained of the return of his old enemy, symptoms similar to above. Examination showed dilated stomach with anacidity and much mucus. Treatment consisted same as Case 1, with a good recovery.

Case 4. A young man, age 30. Active life, with disagreeable surroundings, complained of great headache on lying down, could not sleep, very restless, had lost some flesh on account of it and was fast becoming a nervous wreck. Examination showed an apparent organic heart lesion. I put him on Pulv Digitalis three times a day and ordered artificial Nanheim bath. Sleep followed and the nervousness disappeared. Patient increased in weight from 118 pounds to 150 pounds, and looks altogether a different man.

It would be useless to multiply the report of cases. All tend to recovery as soon as exciting cause can be found,

and in twelve out of seventeen cases, stomach trouble was at the bottom. Savill reports 157 consecutive cases treated at the infirmaries of London, and 102 showed stomach trouble. I think this is sufficient proof that at least the stomach ought to be kindly treated in those cases of neurasthenia. I am sure the patients will be grateful and the treatment will prove satisfactory.

The Treatment of Gout.

Dr. J. W. Springthorpe (*Australasian Medical Gazette,* July 21st), in an article on the Proteid Basis of Gout, bases treatment on the following general considerations:

1. A restriction in the amount of proteid in the food is at once suggested. But in practice we must bear in mind the fact that vegetable proteid is less easily assimilable than animal, and that the inter-relations of the other hepatic functions have to be considered. Hence, discretion is always necessary. During an actual attack meat may, no doubt, be entirely cut off; but, in the intervals, as shown by many cases of chronic gout, cholelithiasis, and phosphaturia, there may be times and patients who thrive best on a plain meat diet, just as there are others, mostly rheumatic, by the way, who have come to regard a vegetarian diet as their salvation.

2. The value of plenty of water to flush the system, of free exercise to oxidize the proteids, of free bowels (especially in the rheumatic with the aid of cholagogues from time to time), of free skin action, even to occasional Turkish and hot salt baths, is also apparent.

3. The importance of protection against chill by clothing and climate is equally obvious. Jager or the like next the skin, or cellular cloth, where wool is irritant, the use of cumerbunds or cholera belts, and avoidance of variable damp climates, are thus indicated.

4. So, too, the frequent use of alkalies, or, as in phosphaturia, the occasional use of acids is justified theoretically as well as practically.

5. The advisability of taking as little alcohol as possible requires no further comment.

Two Old Friends.

We have received some 5-grain Antikamnia tablets, and also tablets of this drug combined with Codeine. Antikamnia, as its name implies, is an analgestic and anodyne and it has gained much favor in the United States both for this and for its antipyretic action. It has been proven not to depress the heart, after the manner of many other coal-tar preparations. Each Antikamnia tablet contains 5 grains of the drug (the usual dose), which can be repeated ever fifteen or twenty minutes, until three or four doses have been taken. Antikamnia and Codeine Tablets consist of $3\frac{3}{4}$ grs. of Antikamnia and $\frac{1}{4}$ gr. of Codeine and have been especially brought forward for the treatment of pain where spasm or physical causes of irritation exist. Neuroses due to suppression or irregular menses, particularly during the menopause, seem more amenable to this combination than to Antikamnia alone. Antikamnia and Codeine Tablets are especially indicated in membranous affections of the lungs, throat and bronchii. Both tablets merit a trial in neuralgia and spasmodic ailments and as their freedom from injurious action upon the heart and circulation is invariable, they will certainly continue to be received by the profession with favor.—*Edinburgh Medical Journal.*

Selected Papers.

Some Practical Problems in Sociology Shown by a Study of the Southern Negro.*

By M. L. Perry, M. D., Pathologist to the State Sanitarium, Milledgeville, Ga.

According to the census of 1900 the total population of the United States is something over seventy-six millions. Of this number there are 8,840,789 persons of negro descent, over 90 per cent. of whom are residents of the Southern States. To come closer home, there are in Georgia 1,038,813 negroes out of a total population of about two and one-fourth millions. These figures show the important role which the negro must necessarily play in our social system, especially here in the South, and to what extent society at large may be influenced by the degree of his development. That the writers and students of sociology throughout the country have been awake to the importance of this subject is shown by the amount of literature which has appeared within the last decade treating of the negro question. Much of this literature, however, has had either a political aspect or has dealt with the social status of the negro race as compared with the white. I do not propose to touch upon either of these subjects. It is the object of this paper to present for your consideration certain conditions existing in the Southern negro which have a profound influence upon their development as a race, and, thus, upon society at large. These conditions are well known to the medical profession, but the laity should, I think, have a better knowledge of them.

First, I will call your attention to the prevalence of venereal diseases. The negro is notoriously lax in his morals. There is in his make-up a large endowment of animal passion, while judgment and the proper consideration of consequences are usually deficient. Having these natural proclivities, let him be placed in an environment where restraint is slight and social caste does not depend upon virtue and chastity (and we know that this is the custom among the negroes in many sections), and what is the result? It can only lead to wide-spread and promiscuous sexual indulgence. Under such circumstances venereal diseases are always prevalent. That venereal diseases do exist to an alarming degree among the negroes in the cities and larger towns is a fact that can be attested by any physician. It is true also that this condition has developed in comparatively recent years; certainly since the days of slavery.

There are two diseases, viz.: gonorrhea and syphilis, which deserve some special attention. They deserve special consideration because both of these loathsome maladies may be, and are, at times, communicated to innocent individuals through the ignorance or care-

*Read before the Georgia Sociological Society, Atlanta, June, 1902.

lessness of the person afflicted with them. Let a servant who, in the discharge of his or her duties, is thrown in daily contact with the members of a household, or a nurse who has the charge of innocent and defenceless children, be afflicted with either gonorrhea or syphilis, and there hangs constantly over that family a blight like the sword of Damocles, ready to fall at any time upon some unsuspecting member. I know of no more distressing sight than to see a pure and guileless child suffering with a loathsome venereal disease. And yet, such cases now and again come to the knowledge of the physician. This is a question which must necessarily appeal to us here, in this section of the South, where we have to depend almost entirely upon the negro race for our domestic servants.

The sociological influence of gonorrhea is limited almost entirely to this question of its communication; but it is not so with syphilis. Here we have to deal with a disease which is insidious in its onset, obstinate in its course, persistent in its attacks upon its victim and whose influence, like the iniquities of which we read in Holy Writ, may be visited upon the children unto the third and fourth generation. Syphilis, at the present time, is making inroads upon the negroes of the South, and its influence will be far-reaching in its effects upon the race. This is due, primarily, to the fact that the negro rarely becomes cured of the disease. As a usual thing they apply for relief from certain disagreeable symptoms, and as soon as this is obtained they give up treatment. Some years since, while serving as interne in a hospital in a southern city, I had abundant opportunity to note this fact. I do not remember but one patient who continued treatment for any length of time after the annoying symptoms had disappeared. Thus, the negro who is afflicted with syphilis goes about for years, it may be, infecting others and procreating children weakened by inherited disease and unfit to assume their place in society.

Tuberculosis is another disease which has, in recent years, become so prevalent among the negroes as to justify the belief that it may soon be a veritable scourge to the race. The susceptibility of the negro to consumption has apparently undergone a most remarkable change within the last thirty or forty years. During the days of slavery the disease was so seldom found among them that they were considered almost immune to it. In fact, some of the older writers took that stand squarely, and asserted that consumption was unknown in the race. From being thus so rare as to be almost unknown, it has, in a single generation, become so prevalent and so fatal that now more negroes in the South are dying with tuberculosis than any other disease. While it exists among all classes, it is in the densely populated quarters of towns and cities, where they live in overcrowded and poorly ventilated houses, that it is found to be most frequent. In institutions, where large numbers are more or less closely confined, the ravages of this disease are becoming truly alarming. In this connection, it may be of interest to state that of the cases coming to autopsy in the negro department of the Georgia State Sanitarium last year, 50 per cent. showed some tubercular involvement, and from observation and study of the subject for a period of three years in that institution, I am of the opinion that this per cent. may be considered a fair index of the existence

of this disease in all our negro patients at the time of death. This high per cent. is of course, not applicable to the race in general, but it is a fact beyond question that tuberculosis exists widespread among the negroes of this section, and, at the present time, is on the increase.

From the consideration of this state of affairs two questions of great importance, from a sociological point of view, present themselves. They are: First, what is its influence upon society, and second, what will be the effect upon the race? When we reflect upon the fact that tuberculosis is infectious and, under favorable circumstances, may be communicated from one individual to another, and that its spread can be checked only by careful attention to personal hygiene, the answer to the first question must be apparent to all. We may safely say that nine-tenths of all the negroes afflicted with consumption are utterly ignorant of its communicability, and, also, of the hygienic precautions necessary for its restriction. The influence upon society of a constantly increasing number of individuals, each of whom is a source of infection of one of the most dreaded and fatal diseases known to mankind, must necessarily be baneful.

The effect upon the race of such wholesale infection must also be bad. It has long been recognized in medicine that the descendants of tuberculous parents are below the normal standard in their resistance to disease. As this taint becomes more pronounced in the race, their physical development will suffer. Indeed, such a change has apparently already begun. The older writers upon the subject emphasize the fact that prior to 1860 the negro was a splendid specimen physically. The following quotation from a paper on "The Future of the Colored Race in the United States," published some years since, by Dr. Eugene Corson, is interesting in this connection. He says: All the information which I have been able to obtain has satisfied me that the race was a healthy one, even healthier in the main than the whites. Since the war things have been reversed; the colored race as a race is not a healthy and robust one; their vitality is in a state of unstable equilibrium, liable from any undue strain to give way. Statistics from institutions, having both white and colored patients, will show that the latter are less able to resist the onslaught of disease. Dr. Mitchell, the superintendent of the Mississippi State Insane Hospital, in his last report says: There is one great difference between the races as regards mortality, and although our treatment, both dietetic and medicinal, is the same, our loss from deaths among the colored far exceeds that sustained by the whites.

Let us see what the records of the State Sanitarium of Georgia show. From the report for the year ending September 1, 1900, we find that the death-rate, based upon the total number under treatment, was in the white department, 5.8 per cent., and in the colored department, 11.5 per cent. From the last report, being for the year ending September 1, 1901, we find a death-rate among the whites of 6.7 per cent., while in the negro department it reached 17.1 per cent. This present year, the ratio up to this time is even greater, and this despite the fact that their care and treatment is the same. These are facts, not theories. They show that under similar conditions the negro at the present time offers less resistance to disease than does the white man, and,

therefore, is a less stable specimen physically. To just what extent syphilis and tuberculosis are responsible for this weakened vitality in the negro, is, of course, impossible to say definitely. I believe, however, that the facts will warrant the assumption that their role has been a major one.

Turning from the physical condition of the negro, let us now investigate the mental stability of the race. Statistics, which are always more important and reliable than mere theories and opinions, shows us here a most extraordinary state of affairs. They show us that since 1860 the negro race in this section (and the same is true of the South generally) has undergone such a change in their tendency toward the development of mental diseases as is shown by no other people in a similarly short period of time in the whole history of mankind. I will take the statistics of our own State, Georgia, a typical Southern State, as they will probably be of more interest to this Society than would those of the whole United States.

According to the census of 1860, there were in the State of Georgia 44 insane negroes. The negro population at that time was 465,698. The ratio of insane to the total population was thus 1 to 10,584.

In 1870 there were 129 insane negroes in this State, out of a total colored population of 545,142 or 14,225.

In 1880 the census shows that there were in the State 411 colored insane, out of a total of 725,133, or 1-1764.

In 1890, according to the census, there were in Georgia 560 insane negroes, out of a population of 858,815, or 1-1533.

The census of 1900 gives the negro population of Georgia as 1,034,813. The bulletin giving the insane population has not yet been issued, but we can approximate very closely to what it will be. There were in the State Sanitarium September 1, 1900, 799 colored patients, and from the number of applications for admission at that time, we may safely estimate that there were, at least, 100 more insane in the State. Reckoning on this basis of 900, we find the ratio of insane to the total colored population in 1900 to be 1-1149.

Thus in forty years the total negro population in the State has been a little more than doubled, while the number of insane has increased twenty-fold. No other such rapid and radical change in the mental stability of a race is recorded in history. Can any one doubt but that the race has been weakened by it? This outburst of insanity becomes still more remarkable when we consider that for generations prior to 1860 the colored people had been free from mental disease. It has developed, therefore, without the slightest hereditary taint. What their condition will be at the end of the next forty years can only be conjectured, but considering the fact that the rising generation will have to contend with a marked hereditary predisposition from which their fathers were free, the outlook in this direction is certainly not encouraging. Even now the brain of the negro does not appear to be able to sustain a mental strain as well as that of a white man. This is shown by the fact, well recognized in asylum practice that the colored insane tend to pass through the primary insanities and become demented more quickly than do the whites. A word or two upon the comparative brain capacity of the two races may be of interest here. I know of no statistics giving comparative brain weights in the sane, but I have taken for comparison the brains of 100 patients of each race dying insane.

The following table gives the aver-

ge brain-weight in these cases, to-
ether with the average normal weight:
Average weight of normal brain in
uman male, 1403 gms., female, 1247
ms.

Average brain-weight in 100 white
atients, dying insane, male 1229 ghs.,
emale, 1197 gms.

Average brain-weight in 100 colored
atie nts, dying insane, male 1229 gms.,
emale, 1092 gms.

The average weight of the brain of
ie negro is thus seen to fall below that
f the white man by something more
an 100 gms., or about $3\frac{1}{2}$ oz. It is
ue that the degree of intelligence is
dicated more by the development than
y the weight of the brain, but other
ings being equal, the average brain-
eight of a race may be taken as an in-
ex of its mental capacity.

From the foregoing we see that with-
the past few decades there has been
decided tendency toward the lowering
f the status of the colored race, both as
gards physical condition and mental
ability. Let us see if we can correlate
ese conditions and find what has been
e cause of this radical alteration in
e racial temperament. We have seen
at they were remarkably free from
at most important of all predisposing
ctors in the production of disease,
z.: hereditary taint. They have been
nature likewise freed from cares
d the harassing burdens of responsi-
lity incident to business and public
e. The mixing of the races has by
me been offered as a probable factor
the weakening of the colored race.
his is untenable, however, for among
e insane, where such effect would be
ost likely to show, we find the full
oods outnumbering the mulattoes.
here is only one influence to which we
can attribute their altered condition; that is, environment, which is applicable to both the physical and mental temperament. The sudden removal of those healthy restraints which for generations past had surrounded them during the days of slavery was following by the taking up of viscious habits of indulgence. The tendency to flock to the cities and towns, which has been and still is so pronounced with the negroes, has had a deleterious effect upon them. There they readily fall into idle habits which are the breeders of vice and crime. It is in these overcrowded districts that syphilis and tuberculosis are found in greatest profusion. The laws of health and hygiene, which in the olden days were strictly enforced, are now too often quite neglected. Unless something can be done either by education or legal enactment to improve this unwholesome and pernicious environment, which to-day surrounds a large element of the negro race in the South, I can only believe that they will go on from bad to worse.

I cannot leave this subject without calling attention to one more danger which is threatening the negro at this time: that is the drug habit. We are all of us more or less familiar with its bad effects uopn the whites, but, believe me, if the colored people, with their strong natural bent toward the indulgence of the appetites, become the victim of drugs and yield to the subtile and delusive enchantment of opium and cocaine the result will be disastrous. There is nothing which has such a benumbing and perverting action upon the moral nature of an individual, to say nothing of the physical and mental effect, as the chronic poisoning by the use of these drugs. I am reliably in-

formed that in some sections of the South their habitual use is already becoming prevalent. So far as I can learn, it has made little headway as yet in Georgia, but a start has been made. Here in Atlanta I am informed by good authority, that, until a few months ago, the habit was decidedly upon the increase, and it had reached such proportions among the lower classes, to whom it seemed to be chiefly limited, that 75 per cent. of the women and 20 per cent. of the men coming to the station house were addicted to the use of cocaine. Since the passage of a law prohibiting the sale of cocaine, except upon prescription, the habits appears to be decreasing. This suggests the remedy, and it is our bounden duty, as the governing and controlling race, to protect these people by the enactment and strict enforcement of such laws in every State.

In conclusion, let me say that I do not wish to appear as an alarmist nor a confirmed pessimist. I have merely presented some facts as they exist. If they are such as to warrant a pessimistic view upon the subject, then the quicker we realize it the better, that we may look about us for some remedy to apply.

Nor do I wish this paper to in any way be misconstrued into an attack upon the southern negro. Far be it from me to cast any reflection upon those honest and honorable negroes who are living right and endeavoring to raise their race to a higher level. It is the erring and afflicted to whom this paper refers, and it has been written only in the hope that through a wider knowledge of the facts some good might come to the negro race and to society at large.—*Atlanta Journal-Record.*

Errors of Diagnosis of Continued Fevers.*

By Horace T. Rivers.

There is not a subject in the whole field of medicine that has been discussed more regularly in medical societies than that of continued fevers and their treatment. It is not my purpose to deal with this phase of the subject, as there have been so many able opinions advanced and defined by very competent men that to review them in a paper of this character would be impracticable. I will confine my remarks to what I conceive to be the errors in diagnosis which are liable to make in the atypical cases which we usually encounter in this decidedly malarial district.

Every physician present has seen cases like the following: May or may not have had an initial malarial paroxysm, with general malaise and slight afternoon rise of temperature, constipation, anorexia, and nausea; on examination you find large, flabby, heavily coated tongue, indented by the teeth skin sallow; breath offensive; liver and spleen enlarged and tender to pressure; perhaps some tympanites or gurgling in right iliac fossa, temperature one, two or three degrees above normal These cases have been variously called typhoid, typho-malarial, continued, and slow fevers.

Actuated by a desire to know the true diagnosis, last fall and winter I secured the blood and urine of thirty cases from the practice of several physicians of Puducah and surrounding country, which were turned over to Dr M. M. Cooley, who made the examinations for malaria and the Widall reac

*Read before the Kentucky State Medical Society, Paducah, Ky., May 7-9, 1902.

ion of the blood; also the Diazo reac-
ion of the urine. These specimens were
rom cases in all stages of the disease,
nd consequently the examinations for
he malarial parasite were not as satis-
actory as we could wish, as in the ma-
ority of the cases the patient had re-
eived heroic antimalarial treatment for
ome time before the specimen of blood
vas secured. The results of the exam-
nations are as follows: Decided evi-
lence of malaria was found in cases
ne, five, six, seven, and ten. The fever
n these cases continued for eight, thir-
een, five, and sixteen days respec-
ively. The Widall reaction of the
lood in these cases gave negative re-
ults, as did the Diazo reaction of the
rine. In none of the remaining twen-
y-five was the examination for malaria
ositive enough to cause us to think that
he very few parasites present could be
factor in the disease, and especially so
ince in no instance did we find the
estivo-autumnal form, which is suppos-
d to be the special one that causes the
ontinued fevers. In this last class the
Widall reaction of the blood was posi-
ive on the first trial in twenty in-
tances; of the remaining, four were
ositive on the second and one on the
hird trial. The stage of the fever
uring which these specimens were
ecured was from the fourth to the
hirty-fifth day. The results of the re-
ction became positive enough to rec-
gnize in from ten to forty minutes. In
majority of the cases the clumping
ould begin in fifteen minutes, espe-
ially if the blood was from a case
uring or after the second week. The
iazo reaction of the urine was positive
every case in which the Widall re-
ction of the blood gave positive results.
two instances in which the Widall
eaction of the blood was negative on
the first trial the Diazo gave positive re-
action. In cases twelve, thirteen, four-
teen, fifteen, sixteen, nine, three, two,
and nineteen, during the course of the
disease there developed all the symp-
toms that we would expect to find in a
typical case of typhoid fever. Of the
remaining sixteen cases a few developed
some of the symptoms, but in not a case
were the typhoid symptoms of enough
prominence to warrant a positive diag-
nosis of typhoid fever—that is, if we
are to accept as gospel what we have
been taught by medical authorities on
the subject.

My conclusions are: First, that we
often have typical cases of typhoid
fever which are readily diagnosed as
favor which are readily diagnosed as
such. Second, that much more fre-
quently they are atypical cases masked
by malarial poisoning, and as such we
have failed to properly diagnose them,
but still typhoid fever just as much as
the typical case which presents every
symptom with such prominence that
the most veritable tyro might not mis-
take. If these cases which give a posi-
tive Widall reaction of the blood are
not typhoid, what are they? It is claim-
ed, and I believe truly, that the Widall
reaction will not occur in any other
disease. We can not believe that it
would be a logical conclusion to at-
tribute to the malarial parasite the
property of generating a toxine which
would possess the power to analyze a
pure, fresh culture of the typhoid bacil-
lus in from fifteen to forty minutes, and
as we can not suspect any other compli-
cating factor we believe that the only
logical conclusion at which we can ar-
rive is to regard all cases of fevers
which continue to have fever for a
period longer than one week after the
thorough saturation with quinine as

typhoid. We are cognizant of the fact that the Diazo reaction is not a diagnostic factor which can be relied upon with as much confidence as the Widall, from the fact that the Diazo may occur in several diseases that might under some circumstances be mistaken for typhoid fever; still, if the Diazo gives positive results after the Widall has shown positive, we can not be far off the right track in saying typhoid fever and sticking to it.

We recognize the fact that a series of only thirty cases, however positive, can not settle a disputed point in diagnosis on such a time-honored subject, and our hope must be that some one better fitted will take up this work and carry it to a successful end.

In conclusion, I wish to thank Dr. M. M. Cooley for the microscopical work which made this paper possible.—*American Practitioner and News.*

Complicated Anæmia.

Ruth K———, aged 14, American, admitted November 14th. Diagnosis: Essential anæmia.

The patient had been sent to me by Dr. B———, who said that in spite of all treatments employed, his little patient had grown steadily worse, and the parents were well-nigh discouraged. Her condition was associated with menstrual disorders; a year previous she said her disposition seemed to change. She found she was becoming morose and despondent, at times hysterical, and suffering very much from melancholy. Her menstrual order was of the menorrhagic form; her complexion was pallid, waxy, skin puffy without œdema; she was easily fatigued upon the least exertion; the heart was irritable; there was shortness of breath, pulse full, but soft, and at times pulsations in the peripheral veins. There was a disgust for food, imperfect digestion and occasional attacks of gastralgia. In the right apex there was a suspicious dullness, indicating a possible incipient phthisis. Examination of the blood showed a relative decrease in quality and quantity of the hæmoglobin, resulting in the blood being paler than normal. The red corpuscles were lighter in color and showed less tendency to form rouleaux; their character was changed, not being of uniform size, some normal, others small (microcytes), others usually large (macrocytes), others irregularly shaped (poikilocytes). The number of corpuscles to a cubic millimetre was about 2,500,500. The white corpuscles were considerably increased in number. A few granular bodies were present, indicating degeneration of the white corpuscles.

The patient was put to bed, secretions regulated, and a half teaspoonful of bovinine was ordered every hour in peptonized milk.

On November 18, the bovinine was increased to a tablespoonful every two hours.

November 30th the bovinine was increased to a wineglassful every two hours, given in peptonized milk, alternating with old port wine. The patient at this time showed some improvement, felt stronger, slept better, digestion seemed excellent, bowels regular, and she slept throughout the night quietly.

December 10th, microscopic examination of the blood showed increased quantity and quality of hæmoglobin, and red blood cells 3,000,000 to the cubic millimetre.

December 18th, the patient had gained seven pounds in weight, color good, puffiness of the skin disappeared, and she was taking daily exercise in the

open air without suffering fatigue.

December 24th, microscopic examination of the blood showed hæmoglobin almost normal, the red blood cells about 4,500,000 to the cubic millimetre, general condition splendid.

On December 26th, patient was discharged, cured.

The complete, thorough and rapid cure in this case was undoubtedly due to the bold treatment, for all through her course of treatment, outside of cathartics and some mild heart stimulant, she took absolutely nothing but bovinine. Bovinine acts in anæmia in all its forms by first stimulating the blood cells to a healthy proliferation, and secondly, by properly and thoroughly supplying perfect nutrition, carries them on to a full and healthy maturity. Iron in all its forms, while at first undoubtedly beneficial, can only go half way, for it simply stimulates the proliferation of the blood cells and supplies only partial nutrition, the results being that in the majority of cases where it is employed alone, many of the newly born cells, for lack of proper nutrition, atrophy, or become granular bodies.

Substitution and Imitation Again.

Almost at the time we were writing an article relating to this subject that appeared in our edition for June, a trial was going on in New York that resulted in the conviction and fine of a druggist for substituting another preparation in place of the one prescribed. Messrs. Fairchild Brothers & Foster, the well-known manufacturing chemists, a house whose integrity is unquestioned, for some time past have been aware that imitation mixtures have been dispensed in place of their essence of pepsin. They have instituted prosecution in several instances, and the result in one of these is thus told in the New York press of May 24, 1902:

"In Special Sessions on last Tuesday before Justices Wyatt, McKean and Hinsdale, Clarence D. Bowman, a director of the Lewis A. Bates Company and the manager of their drug store in No. 739 Sixth avenue, pleaded guilty to having violated section No. 364 of the penal code in using another preparation in place of essence of pepsin manufactured by Fairchild Brothers & Foster, in filling prescriptions calling for the latter preparation. He was fined $50.

"It appeared that on several occasions when physicians had prescribed Fairchild's pepsin Bowman had delivered the imitation mixture. Bowman said he was sorry for what he had done, but had no excuse to offer. In imposing sentence Justice Wyatt said that the offense was a most serious one, and that a heavier penalty would have been imposed had not the injured firm recommended leniency by reason of its being the defendant's first conviction."

We are pleased to record this additional conviction for a crime that ought to be punished with all the severity the law permits. It is a subject in which physicians take a deep interest, and they should unite with druggists and pharmacists in bringing all such offenders to the bar of justice.—*Buffalo Medical Journal.*

A Powerful Diuretic.

Although the materia medica abounds in drugs having a diuretic action, but few of them can be considered pure diuretics, the majority producing their effect in an indirect manner. Among the pure diuretics theobromine has been extensively employed in late years in the form of the salicylate. This

preparation, however, is not free from irritating effect upon the gastro-intestinal tract, owing to the contained salicylic acid, and for this reason Dr. Impens, of Brussels, after considerable experimentation, succeeded in producing a double salt of theobromine sodium and acetate of sodium, to which the name agurin has been given. This preparation has been made the subject of extensive clinical studies in the clinics of Professors Von Litton, of Berlin; Destree, of Brussels; Buchwald, of Breslau, and Von Ziemssen, of Munich. The results of these tests have shown that in the dropsy of cardiac disease, agurin is a prompt and reliable diuretic, free from any irritating effects upon the digestive organs or kidneys, while in some cases of ascites due to cirrhosis of the liver and in cases of edema from chronic interstitial nephritis, without marked destruction of the renal epithelium, the drug acted efficiently. The diuretic value of agurin is further confirmed by some conclusions presented by Dr. A. C. Barnes (*Medical Record,* May 24, 1902) in a discussion before the American Therapeutic Society, according to which the acetates form double salts with theobromine which are soluble and are powerful diuretics, of which agurin is a type.

Blood for Babies.

In the course of the second year there comes a time when the milk diet begins to be insufficient for the growing child, and nature calls for a change, while yet the system is in many cases unprepared for solid food. This kind of deadlock results in diarrhœa or constipation, anæmia, restlessness, fretfulness, etc. In such cases the fit and radical remedy will be found in the administration of say ten drops of bovinine in a little milk, at intervals of three hours.

Little Robert Valverdie, a patient who came under my care in the condition of malnutrition above described (after trying all the usual medical helps with no benefit) was immediately restored by the direct blood treatment. On the second day of taking bovinine, the constipation and other trouble began to be relieved, and on the third day all signs of ill health had disappeared as if by magic. This simple treatment was continued for three weeks, the child thriving beautifully.—*Case reported by Dr. T. J. Biggs.*

Lassar's Paste to Protect the Skin Against Moist Dressing.

The *Journal de medecine interne* for August 1st states that in order to protect the sound skin around an inflamed or infected surface from the maceration caused by moist dressings, M. Leredde protects the sound parts by the application of Lassar's paste, the formula of which is:

R Starch.....
Zinc oxide..... } ....equal parts.
Vaseline.....
Lanolin.....

Literary Notice.

W. M. Sweet, Philadelphia, concludes:

1. The size of the splinter of iron or steel, and its approximate position in the eyeball, should be known before an attempt is made to extract it by either the medium-sized of the giant magnet.

2. The x-rays are the most certain method of diagnosis in injuries from all kinds of foreign bodies.

3. The large and medium-sized magnets are of value in determining the presence of iron or steel, but negative findings can not be accepted as conclu-

sive evidence of the abscence of the metal in the eyeball.

4. The Haab magnet is superior to all forms of smaller magnets in extracting iron or steel from the vitreous chamber by way of the anterior chamber, but the great power of the instrument requires that it shall be used with caution.

5. When the body is to be extracted through an opening in the sclera close to the previously determined position of the metal the medium-sized magnets are shown by experiments to be as effective as the giant magnet.

6. The entrance of the magnet points into the vitreous is harmful, and should never be attempted except when other means of extraction have failed.—*Jour. A. M. A.*

Pruritus Ani; Strong Heat Its Best Remedy.

E. Andrews states that this form of therapy was suggested to him by the means employed by many wood cutters and farmers to cure chilblains. The latter expose the bare skin to the direct heat of a fire, and find not only great relief but, after a few treatments, a permanent cure. Acting on this suggestion, Andrews has devised an apparatus consisting essentially of a rectal cylinder of hard rubber with a diameter of three-quarters of an inch, and passed two inches into the anus. The cylinder is closed at the upper end and has inlet and outlet connections. In this way it is possible to run a stream of hot water through it. The highest heat endurable is about 130 degrees F. A thermometer in the supply bag will indicate the right temperature. The patient may lie on the side with the knees drawn up or sit obliquely on one hip or astride a chair with the hips over the edge. At first the injections may be taken twice daily; then at intervals of several days. Of course, the physician should remove all discoverable causes of the pruritus.—*Med. Record.*

Treatment of Furuncles.

M. P. Desfosses (*Presse medicale,* July 9th) says that, when it is not possible to abort a furuncle, a prolonged hot bath, when the furuncle is favorably situated, will soon mitigate the pain. Hot compresses of bichloride of mercury, one to 2,000 covered with oiled skin or rubber tissue and changed four or five times daily, will relieve pain and hasten suppuration. Incision the author regards as the proper treatment when the furuncle has reached its full development. A deep incision with a bistoury or a crucial incision may be made, according to circumstances. As to general treatment, saline purges may be useful, while arsenic, the alkalies, and intestinal antiseptics are recommended. Brewer's yeast, in doses of a teaspoonful three times daily, acts very well and sometimes prevents the formation of new furuncles, but its effect is not always constant. Prophylactically, frequent washings of soap, with alcohol and minute attention to the cleanliness of the skin, are advised.

Foreign Bodies in the Eye.

Missionaries in India among the Telugas have been so much impressed with the value and importance of the two books by Rev. Dr. Stall, entitled "What a Young Boy Ought to Know" and "What a Young Man Ought to Know," that they have translated them for publication and use in their work.

MEDICAL NEWS AND ITEMS.

Nothing has yet been heard of Dr. William H. Bates, who so mysteriously disappeared August 30th.

Dr. Allen Fitch, New York City, has resigned and will spend two years abroad in the study of insanity.

Dr. Howard A. Kelly, of Baltimore, has donated $10,000 toward an addition to the gynecological building at the Johns Hopkins University.

Typhoid fever is at present more prevalent in Chicago than at any other time since the three years immediately preceding the World's Fair.

Plans have been made for the reconstruction of the old Bellevue Medical College building in the Bellevue Hospital grounds on 26th and First Avenue, New York.

Eighty-five cases of trachoma were found among the steerage passengers of the French line steamship La Gascogne and the Red Star liner Zeeland, which arrived at the port of New York two weeks ago.

Spitting Ordinance to be Enforced.—Dr. Joseph H. Raymond, the assistant sanitary superintendent having charge of the Borough of Brooklyn, announces that he will rigidly enforce the ordinance prohibiting expectoration on sidewalks, railway platforms and other public places.

It is announced that the Portuguese capital, Lisbon, is infested with rats of great size, against which cats seem powerless. The local authorities have inoculated a number of the rats with an infectious disease to which human beings are insusceptible. It is hoped in this manner to kill off a majority of the rats.

An Interrupted Operation.—Just as a patient in the Polyclinic Hospital had been etherized and the first incision made for some operation on the intestine, an explosion in the sterilizing apparatus put the surgical apparatus out of commission. A hurry call was sent to Bellevue Hispital for an ambulance, and the wound having been hastily dressed the man was rushed at top speed to that hospital, and the operation completed. He died, however, in a few hours.

Thief in Bellevue.—An orderly in the interne's quarters of Bellevue Hospital has been arraigned in court on the charge of stealing clothing, jewelry and surgical instruments from members of the house staff. It is said that he has carried on his thefts for months, and that these stealings represent in value over two thousand dollars. When arrested there were upwards of fifty pawn tickets on his person, and a large assortment of surgical instruments was found at his lodging. He had formerly been a patient.

While the Kaiser Wilhelm de Grosse was making her way to the port of New York recently one of the passengers was taken ill with symptoms of appendicitis. An operation was indicated, but as land was so near it was deemed advisable to wait until the ship arrived. Accordingly, a wireless message was sent while the boat was still fifty miles away, and in response to the call an

mbulance was in waiting when the ier was reached. The patient, a son of ormer Prime Minister di Dudini, of taly, was taken to the hospital, opera- ed upon, and is now convalescent.— *Medical Record.*

The majority of these immigrant ews have gone no farther than New ork City, the consequence being that he Jewish population of the metropolis s greater than that of any city in the vorld. An article in a recent issue of he *Jewish World* places the number of ews in New York at 600,000, and al- hough these figures are probably exag- erated, still there are in the neighbor- ood of 500,000 members of the He- rew race in Greater New York; and s all but a relatively few are in the Borough of Manhattan, that portion of he city has one person in nearly every our a Jew.—*Med. Record.*

The Straus Milk Charity.—For the ast twelve years, through the philan- hropy of Mr. Nathan Straus, the poor ave been supplied in the summer from umerous milk depots with Pasteurized nd modified milk for infants. The Health Department records show that he mortality among infants under five ears of age has steadily decreased uring these years, and it is asserted hat this diminution is most marked in hose districts of the city in which this ilk is most freely distributed. The ummer mortality has been reduced bout one-half, largely, it is thought, hrough the good work of this charity. —*Jour. A. M. A.*

The surgeons of the New Orleans ye, Ear, Nose, and Throat Hospital ave noted the great number of patients ntering the institution from the coun- y around New Orleans suffering from artial or total blindness. An investi- ation has disclosed the fact that a cheap antiseptic, containing a large amount of wood alcohol, has been used throughout Louisiana. The city chem- ist found as much as 30 per cent. of methyl alcohol in some of these speci- mens, rendering them totally unfit for internal administration. As methyl al- cohol, when taken internally, acts directly on the optic nerve, the majority of the persons affected will not fully re- cover their eyesight. — *Philadelphia Medical Journal.*

Increase of Jews in New York City. —The Jews are a race that increase and multiply. They are both prolific and tenacious of life, the latter being great- ly due to their temperate habits, and to their observance of the sanitary or- dinances of their religion. The Jews in the United States have increased in number from 130,000 in 1891 to 1,058,- 000 in 1901—a truly remarkable show- ing. Of course the immigration of Jews of late years has been very heavy, especially from Austrian and Russian Poland. In fact, something like seven times as many Jews entered this coun- try during the past ten years as during all previous years, and at the present time America contains twice as many Jews as does Germany.

The San Francisco Board of Health. —A breezy report, and one outside of the usual order, is that of the Board of Health to the Mayor of San Francisco. It will be remembered that this Mayor, whose name is Schmitz, summarily dis- charged the Health Board last March, the reason being that that body had had the courage to tell the truth re- garding the existence of plague in the city. Fortunately, the courts interven- ed Mr. Schmitz, the old Board was con- tinued, and this report is devoted in great part to its review of the Mayor's conduct. At the time this report was

made there had been fifty-seven cases of undoubted plague in San Francisco; from that date, June 30, to August 23, there were eleven additional cases, making the total sixty-eight.—*Medical Record.*

The first annual meeting of the North Carolina Academy of Science for the presentation of papers will be held Friday and Saturday, November 28th and 29th, 1902, not on October 3d and 4th, as was announced in a previous letter. This meeting will be held in the Physical Lecture Room of Trinity College, at Durham. The preliminary program will go to press October 4th. The committee already has in hand a number of titles, but it is desirable that all who intend to be present and present papers should send their titles to the committee before October 11th, in order that they may appear properly on the preliminary programme. The membership and fellowship of the academy continues to grow, and hearty co-operation is met from every quarter. The success of the coming meeting, and of the Academy, is assured.—*Committee of Arrangements, F. L. Stevens, Chairman.*

Sentence Upon a Physician for Malpractice.—The report of medico-legally important cases is always significant. Hence note is made by Dr. Keferstein, imperial court physician at Madgeburg (C'blatt f. Gynak., 1902, No. 23) of the sentence to five months' servitude pronounced upon a physician for applying an obturator to prevent conception in from 100 to 800 women, which in five caused bodily damage. It consisted of a disc with two arms attached which separated within the womb to retain the device *in situ.* Its use lowered the birth rate to a very large degree, because although semen could pass upward through spaces permitting menstrual outflow, the presence of the arm within the cavity prevented arrest and development of the fertilized ovum. In one of the women an arm of this villainous foreign body broke off and in others various injuries to the womb occurred. Since the doctor represented to his patients that his obdurator was "harmless" as well as "effectual," he was adjudged guilty of malpractice and accordingly punished.—*Medical News.*

Yellow Fever Germ Found.—The expected announcement of the yellow fever germ is reported in the telegraphic news from New Orleans as given by Prof. George Beyer, of Tulane University. The commission sent by the United States Marine Hospital Service has for several months been at Vera Cruz studying the epidemic which was of a particularly pernicious type the mortality at one time reaching the frightful figure of 87 per cent. The germ of the disease was definitely found, and its character and habits fixed. It is of much higher order of life than had been anticipated, being an animal, not a vegetable organism. That found in the bodies of sufferers from the disease was identical with the germ found in the mosquitoes. During the epidemic at Vera Cruz the mosquitoes were especially numerous. The authorities of the Mexican city determined to inaugurate a war against the insects and appointed a committee, with Prof. Beyer at the head, to exterminate the mosquitoes. The result of the war was that the number of cases of yellow fever were reduced one-half. Prof. Beyer would not say whether the germ discovered at Vera Cruz was or was not the Sanarelli germ, but the belief is that it is a germ never before discovered.—*Jour. A. M. A.*

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For Eczema due to Intestinal Intoxication.

Dr. Nelken (Proceedings of the Orleans Parish Medical Society, July 1, 1902) in a paper read before the society reported the case of a three-year-old boy, whose "face was one large sore, swollen and covered with scabs of dried blood." There were also patches on both elbows and knees. He had been subjected to various methods of treatment, internal and external. Dr. Nelken, considering the condition dependent on intestinal poisoning pursued the following course:

℞ Calomel..... 1 grain;
Salol..... 20 grains;
Guaiacol carbonate..... 15 grains;
Lactopeptine..... 30 grains;
M. ft. pulv. no. xii. One powder to be taken three times daily.

A restricted diet was ordered, greasy foods and sweets, as well as fruits and pastry in any form being forbidden. Locally, the following ointment was applied morning and night with gentle massage:

℞ Tar water..... 1 drachm;
Ointment of rose water..... 1 ounce;
Zinc ointment to..... 2 ounces.
M.

Washing with plain water was forbidden, but twice a week water to which sufficient bran had been added to make it milky was used to wash with, the face being cleaned every day with a cloth saturated with olive oil.

Improvement soon became rapid. The bowels acted regularly. His general condition improved, and at the time of the report the child's skin had been perfectly clean for three months.

Colds in Old People.

For the slight colds often seen in the aged, even during warm weather, the main indication is for a stimulant expectorant that will disturb the stomach as little as possible. Much better than the ordinary ammonium carbonate preparations under these circumstances is the following formula, which has been extensively used with satisfaction:

℞ Spt. ammon. aromat. ..... f ℥ i
Spt. chlorof ..... f ℥ ii
Aq menth. pip..... q. s ad f ℥ iii.—M
Sig.—Tablespoonful every four hours.

Acute Rheumatism.

Prof. George Dock, of Ann Arbor recommends the following prescription for acute rheumatism:

℞ Sodii saliclat .....
Sodii carbonat..... aa ℥ ii
Aq. camphoræ..... q. s. ad f ℥ vi.—M
Sig.—One tablespoonful in water every hour.

He considers that any form of nephritis, either acute or chronic intestinal constitutes an absolute contraindication to any form of salicylate treatment.

A New Tæniafuge.

From the New York Medical Journal.

The *Arte Medica* for August 24th cites the following from the *Giornale di farmacia, di chimicae e di scienze affini* 1902, as a "certain and innocuous tæniafuge for adults:"

℞ Black copper oxide.....
.....6 grammes (90 grains)
Calcium carbonate. 2 grammes (30 grains)
Levigated white bole.....
.....12 grammes (180 grains)
Glycerine ..... q. s.
M. ft. pil cxx. Two pills to be taken four times daily, avoiding acid foods. On the last day a dose of castor oil should be taken.

Verge of Collapse

Colden's Liquid Beef Tonic pulls the exhausted forces together; furnishes staying and resisting power to shattered nerves and presents nutriment to perverted digestive glands in a form eagerly seized on, and transformed into rich blood; steadily brings the whole system away from the danger point—soothing, nourishing, invigorating, building. Wide use in hospital and private practice bears out the verity of each of these statements. Colden's Liquid Beef Tonic commands attention throughout Europe and America. Ext. Carnis Fl. Comp. (Colden) Beef, Brandy, Cinchona. No. 1 with, No. 2 without iron. In their most eligible and active forms.

Sold by druggists generally.

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The Unspeakable Turk.

Mr. Ray Stannard Baker, the well known magazinist, has lately contributed to *The Outlook* two articles on conditions in Turkey as seen by a trained observer. The following is his description of the state of affairs in the Turkish postoffice, and of Turkish backwardness generally:

The Turk suspects everybody and everything, and no private act, no seclusion, is safe from his intrusion. Every telegram sent from the public offices is at once reported to the authorities. No one can safely send a letter by the Turkish post unless he is willing to have it opened and read, and take the chances of having it confiscated if the censor finds anything that can be twisted into an insult to Mohammedanism. As a result of this condition and the inability of foreigners residing in Turkey to communicate with any certainty with their friends, some of the great European nations have established postoffices of their own in Turkish cities, in which they employ only Europeans, use their own stamps, and watch their mail bags until they pass beyond the prying eyes of the Turks. In Salonica there are no fewer than five postoffices—British, Austrian, French, Servian and Turkish; in Constantinople, six. If one wishes to be sure of his mail, he must inquire at four of them at least; and if he really wants to have his letters reach their destination, he must send them through some postoffice other than Turkish. For the reason that the authorities cannot be sure of a complete knowledge of all the conversation that might pass, the telephone has been excluded from the empire; and no Turkish city is electrically lighted because, it is said, the officials discovered the word dynamo in the applications for the necessary contracts, and dynamo suggesting dynamite, the official Turk was paralyzed with fear! So all Turkey is still candle-lighted, or at best lamp-lighted. Whatever is Turkish in Turkey is sure to be out of order, disorganized, dirty; whatever is foreign is, by contrast, well kept.

The Outlook.

Three series of articles of special interest, both because of their authorship and their subjects, are announced to appear in *The Outlook*. One is "The American Navy," by Ex-Secretary John D. Long, who is better equipped than any other living man to tell the inner history of the plans which made our navy capable of distinguishing itself in the war with Spain and of the plans now under way for the extension and strengthening of that navy; a second deals with race and industrial questions in the South, and it written by Mr. Walter Page, whose editorship of *The Forum*, of *The Atlantic Monthly* and of *The World's Work* has made him known as one of the ablest thinkers and writers about current topics in the country; the third is a series relating to conditions in the South American republics, based on extensive travel through those countries, undertaken for this express object, by Mr. Archibald R. Colquhoun, whose books, "The Mastery of the Pacific" and "China in Transformation," have been recognized by all students of international affairs as of great moment.

Newer Materia Medica.

low to Assist Young Girls to Womanhood.

The primary establishment and the enopausal cessation of menstruation re the two crucial physical epochs of oman's life. The change from maidnhood to womanhood is one that inolves the whole body, and manifests self alike in the form, the voice and e sexual and nervous phenomena. In n ideal state of perfect health this ansition into puberty should be as atural and uneventful as gliding from leep into consciousness. Owing, howver, to the present civilized modes of ving, the cerebral development of oung girls is fostered and forced to degree that deprives the remaining ssues and organs of their necessary utrition, and too often we are called pon to treat delicate girls that are like uds blasted in the blossoming. Many woman traces back a prolonged existnce of semi-invalidism to exposure and ack of care at the early menstrual eriods. Tight lacing also predisposes pelvic disorders by interfering with rculation and exciting uterine dislacements. The strain of puberty upon e nervous and blood-forming strucires may be too great in a subject ereditarily deficient in vital resistance nd adaptability. So we may count mong the morbid incidents more or ss peculiar to puberty, chlorosis and nemias, general debility, neurasthenia and hysteria, acute pneumonic phthisis, chorea and hebephrenia.

According to Emmet, more than half of all women who have suffered at puberty from mentrual derangements are sterile and delicate in after life. Skene has stated that his observations showed that the vast majority of incurable diseases peculiar to women originate in imperfect development and consequent derangement of function. This development is either primary, during the embryonic stage, or secondary, at puberty. Defects in the former are irremediable, whereas secondary deviations from the normal standard are both preventable and curable in most instances.

It is important in connection with the subject under consideration to bear in mind the essential reciprocal relations of the reproductive system and the general organization. As Virchow says, all the specific properties of woman's body and all her womanly characteristics, depend upon her ovaries. In other words a woman is not fully a woman unless her sexual development is natural and complete and in line with a healthy general organization. A beautiful illustration of sexual dimorphism has been furnished by Prof. Max Weber (quoted by Skene), who presented the case of a chaffinch in which the left side of the body had the female coloration and the right side that of the male bird, the two colors being sharply limited at the middle line.

The bird was a hermaphrodite with a well-developed ovary on the side of the female plumage, and a testicle on the opposite side. The phenomena of menstruation offer the most palpable evidence of the onset of puberty. The precise nature of this rythmic cycle is overshadowed by a jungle of theories, and, as Milikin well says, we can do no better in the present state of our knowledge than accept menstruation as a habit which has been nailed upon our race by hereditary, and which is for us an ultimate biologic fact.

Normal menstruation in temperate climates generally begins in the fifteenth year. In the tropics it appears much earlier, so that in Mexico one may see a grandmother of only twenty years. Within the Arctic Circle Eskimo girls do not generally arrive at puberty until the eighteenth year. City girls usually have the menstrual flow earlier than do hard working country girls, in whom muscular exercise has the same derivative effect on the pelvic blood as too intense devotion to study. The time, amount and character of the menstrual flow vary normally within wide limits. The menstrual cycle for different individuals ranges in perfect health from two to six weeks. The average duration in the temperate zone is about four days. Soaking more than three napkins daily is considered abnormal. Anemic girls, as a rule, tend to menorrhagia; chlorotic ones, to scanty menstruation. Clots are present whom the amount of blood is great, or the mucus and fatty acids scanty. A periodic white menstruation, from supersecretion of the uterine glands, is not infrequently noticed in the intervals midway of menstruation.

Menstruation is or should be a perfectly physiologic process. In the virgin disorders of menstruation of whatever nature are nearly always dependent upon the defective nutrition of the reproductive organs, and this in turn upon a blood supply insufficient in quality or in quantity. In the great majority of cases, therefore, our efforts to aid nature in effecting the transformation of the girl into a woman, should be in the line of a happy balance of nutrition between the special female organs and the body as a whole.

Hygenic measures are of the first importance. Fresh air and sunshine are always in order. Exercise is especially indicated for the fat and flabby chlorotic girl, and her diet should be restricted in sugars and starches. The highly active, intellectual girl must rest from her studies and try to become a little lazy. Proper precautions should be taken in regard to reasonable care of the person at the time of the monthly periods. Yet the physician should beware of unduly alarming his little patient, and so bringing about a condition of hypochondrical valetudinarianism. Simple cleanliness is certain to do no harm, but good. The conservation of the general health and vigor is the chief factor in maintaining safe and easy menstruation.

In spite of hereditary defects, if the physician could have full control of the diet, clothing, hygiene and environments of the little girls in his clientele up to the date of puberty, but little if any medication would be then required. Unfortunately however, the lack of harmonious development in the preadolescent period necessitates considerable medical attention to secure a normal course for the critical metamorphosis of puberty, whose influences, as Dudley remarks, are fundamental, not only in the reproductive organs, but in the en-

tire woman. Actual pain at the menstrual period in the young virgin may be considered always pathologic, and the same is true of menorrhagia or very scanty menstruation. Such abnormalities of function should direct our attention to the state of nutrition especially. The obese, chlorotic girl must take more exercise; the thin, delicate, sensitive girl, more rest. Fresh air and sunshine are needed in every instance. Red meat, eggs and other blood-forming foods should be taken in such quantities as can be well borne. The appetite for wholesome nutriment should be encouraged, if need be, by stomachic stimulants, such as the official elixir of strychnin, pepsin and bismuth. The use of bromides, coal-tar analgesics and diffusible stimulants at the menstrual periods can be regarded only as a temporary makeshift.

The most constant and positive clinical sign of imperfect puberty is deficiency of the blood in red corpuscles and hemoglobin, the chlorotic type being perhaps more common than the simple anemic in relation to menstrual disorders. Hemis defects and malnutrition act reciprocally as cause and effect. The oxidizing life of the blood is in the iron it contains, with about one-twentieth as much manganese. The total iron of the adult body amounts to but 2.5 or 3.5 grains, chiefly in the form of hemoglobin. The normal daily contents of iron in the food of an average diet, is, according to Stockman, from five to ten milligrams. When absorbed, as in health, this food-iron replaces the metal continually lost by disintegration of blood corpuscles and excretion. The fund of iron in the body seems to be from the duodenum to the mescenteric glands, thence to the thoracic duct, the general blood current and the spleen, from where it passes to the liver to be synthetized into hemoglobin for the red cells, on the breaking down of which the dissociated iron is eliminated by way of the large intestine.

The use of iron in anemic and chlorotic conditions is, of course, a cardinal principle in therapeutics. In girls becoming women to supply a deficiency of erythocytes or hemoglobin, one might infer at first thought that the best method would be to administer hemoglobin, that is, blood in some form. Chemistry proves, however, that when hemoglobin is taken into the stomach it is changed by the acid there to hematin (causing the coffee-ground color of small gastric hemorrhages), which, according to Cloetta, passes down the alimentary tract without being absorbed.

Most authorities conclude that inorganic compounds of iron in order to be absorbed must first be changed to albuminates by combining with food matters. All albuminous substances are hydrolyzed to peptones before they are capable of absorption. Hence it follows that a peptonate of iron is the preparation most likely to be readily and completely absorbed and assimilated. The best remedy of this composition, I think, is Gude's Pepto-Mangan, which I have used for the past ten years with great satisfaction, particularly in the hemic and nutritive disorders of female puberty.

This neutral solution contains three grains of iron and one grain of manganese in each tablespoonful. The latter ingredient is doubtless to be credited with a large part of the nearly specific effect of the remedy in functional menstrual derangements. The preparation is pleasant to the eye, agreeable to the palate and has the great advantage over inorganic iron compounds of not cor-

roding the teeth, deranging digestion nor inducing constipation. According to the nature and severity of the case, the dose varies from a teaspoonful to a tablespoonful. It is well taken in milk or sherry just after meals.

The following brief clinical notes may serve to illustrate the facts above stated. The blood count in each instance was made with the Thoma-Zeiss hemacytometer; hemoglobin was calculated by the Hammerschlag specific gravity method. I need hardly remark that the blood findings at the altitude of Denver are normally higher than at points near sea level.

Case 1. Jose K., 15 years, thin, delicate and somewhat strumous, had menstruated irregularly and intermittently for 16 months; erythocytes 2,600,000, hemoglobin 58 per cent. She was taken out of school, put on a diet largely protein, given aloin, strychnin and belladonna pills for her bowels, and for her blood, Pepto-Mangan (Gude), a dessertspoonful four times daily after eating. Under this treatment she made an average weekly gain of 1¼ pounds in weight, about 150,000 red cells and 3 1-3 per cent. hemoglobin, and was discharged cured in ten weeks.

Case 2. Alice R., 18 years, rather stout but pale, with greenish tinge; complained of palpitation and breathlessness on slight exertion; menstruation barely begun and scanty. She was made to take gradually increasing exercise on her bicycle, a cool bath every morning, less carbohydrates and more proteins in her diet, and Pepto-Mangan (Gude) in the dose above mentioned. She recovered from all her morbid symptoms within four months, and has since married and given birth to two healthy children.

Case 3. Amelia B., 23 years old, an overworked servant girl, had suffered since the periods first began, nine years before, with marked dysmenorrhea, the flow being prolonged but rather scanty. The red blood cells numbered 3,800,000 per cu. m. m., with proportionate oligochromia. She was induced to rest at home and take six eggs daily, along with other nourishing food and Pepto Mangan (Gude), a dessertspoonful four times daily an hour after food. She made a very rapid recovery, the red cells running up to 4,900,000 within two months and the menstrual period becoming quite normal. By exercising proper care she has remained well for the past eight years.

Case 4. Olive M., 13 years, blonde thin, active, sensitive, a hard student just beginning to menstruate, the flow being scanty and accompanied with pain. The blood count was 63 per cent of normal, the color index 57 per cent. Under treatment similar to that mentioned in the first case, she became round and rosy, menstruated freely and easily, took on 17 pounds in weight and raised the blood findings above the normal at sea level, all within eight months.

Case 5. Fannie R., 17 years, active ambitious, intelligent, had such excruciating pain all through her menstrual periods for two years as to cause actual wasting. Physical examination revealed nothing abnormal except an undersized uterus. She was given Pepto Mangan in tablespoonful doses three times a day, and was told to lie with her head lower than the hips. After three months treatment the periods became quite painless, and have remained so for five years.

Case 6. Flora J., 16 years old, began to menstruate profusely a year before, since which time she has been always ailing; erythrocytes 3,100,000

emoglobin 63 per cent. She was given ool baths and massage, a bitter tonic, axatives and Gude's Pepto-Mangan in lessertspoonful doses. When discharg- d cured, five months later, the blood ount was 4,700,000, hemoglobin 95 per ent.

Case 7. Maggie W., aged 15, lerk in a department store, was ex- remely chlorotic (hemoglobin 28 per ent.), with a soft, systolic basic mur- nur and some symptoms of gastric lcer; menstrual molimnia but no flow. She was kept in bed at home, fed large- y on meat, fish, and eggs, and was iven Pepto-Mangan (Gude) thrice aily a tablespoonful at a time. The unctional murmur soon disappeared, he iron in the blood came gradually up o normal, the patient lost in weight as he gained in health, and menstruation ppeared regularly.

Case 8. Nora R., 14 years, healthy n appearance but neurasthenic; no rouble with menstruation, except at his time she became more nervous and eveloped a rapid pulse and some swell- ng of the thyroid gland. For this incip- nt exophthalmic goiter she was kept n bed with a cold pack over the thyroid the menstrual period, and was given epto-Mangan (Gude) steadily for six onths in dessertspoonful doses. She ad been quite well and free from the mptoms mentioned for over a year.

In conclusion the writer would like emphasize the peculiar physiologic ficacy of Pepto-Mangan (Gude) in ding young girls to a normal woman- ood, when the crisis of puberty is com- icated with any defect in blood- aking and nutrition. Its action is ompt and pleasant, and the clinical nefits derived from its use are readily parent to all concerned. In curable cases it is as nearly specific as any combination of drugs could be.

Sanmetto in Enuresis, Catarrhal Troubles and Atonic Conditions of the Genito-Urinary Organs.

This is to certify that I have used Sanmetto for the past eight years, and I can truthfully say that it has come to my aid in my practice in such cases that I deemed was necessary, such as enuresis, cataarhal trouble and atonic conditions of the genito-urinary organs. In every case where I have used it faithfully, it has proved to be all claimed for it—a potential remedy. I have taken it myself. As I am over 70 years of age, it has come to my rescue, and the relief is phenomenal. I have practiced medicine over thirty years here in Cincinnati.

Wesley H. Watson, M. D.
Cincinnati, O.

Great 12 Year Old Ulcer Healed.

Mike L.; aged 57, Irish. Diagnosis, ulcer of left leg. Admitted to hospital March 3, 1902. This condition was of about 12 years standing, and during that time had never entirely healed. He had been treated at various hospitals and at various clinics and by private physicians, but said that he got no special relief. The ulcer was a large one situated on the calf of the leg, being 4 by $3\frac{3}{4}$ inches. It was covered with unhealthy granulations which exuded a foul-smelling purulent discharge. The surface of the ulcer was thoroughly cleaned up with a dermal curette, and dressed with a wet Thiersch pack. This was kept wet and not changed in 24 hours. At the end of the 24 hours this dressing was removed, the wound thoroughly cleansed with bovinine and

hydrozone reaction, followed by Tiersch irrigation, and dressed with bovinine pure. The bovinine dressings were changed twice in 24 hours, and the patient got a wineglassful of bovinine internally, every three hours. March 23d, the ulcer had healed with the exception of a small space at the upper periphery. This was touched up with a 25 per cent. solution of pyrozone, and dressed with bovinine pure; the dressings being renewed twice in 24 hours. March 30th, the patient was discharged cured; the ulcer having become covered with healthy skin, and no scar tissue, it being almost impossible to tell it from the surrounding skin, the only difference being that it was a little redder.—*T. J Biggs, M. D.*

Seemingly Astounding, Yet True.

Dr. R. C. Burrow, of Maxon Mill, Ky., gives the following experience:

Miss L. H. had been confined to her bed for three months, suffering with malarial fever. When I was called, I found fever broken, but patient had hardly strength enough to sit up. As she had never menstruated, her mother thought this, in a great measure, the cause of her trouble. After three months' treatment she was again in fair good health, her menses also appearing, but very painful and scanty. I rested treatment for three months more, hoping that good nourishment and nature would re-establish all functional activity. Her suffering, however, grew worse at each menstruation. I then prescribed Ergoapiol (Smith), one capsule four times a day, beginning three days before the expected period. This treatment gave immediate relief and resulted in regular and perfect menstruation. It is now four months since the administration with Ergoapiol (Smith) has been stopped, and she has had no indication of the previous trouble.

Mrs. C., married, had severe attack of La Grippe last winter. Had not menstruated for the past four months. I prescribed Ergoapiol (Smith), one capsule every three hours. Menses appeared on the third day, and again at the last menstrual period.

Mrs. F., married, consulted me in January. Said she had not menstruated for two months. I suspected pregnancy and declined to treat her. She called again in May and declared positively she was not pregnant. I then prescribed one capsule of Ergoapiol (Smith) before meals and two at bed-time. Menses appeared on the third day.

B. S., single, teacher. Menstruation began at the age of thirteen. Each period, however, was accompanied with the most excruciating pain, compelling her to take to bed for two and three days. This patient, who was large and in good health, said menstruation was free enough and all would be well but for the terrific pain which usually set in after menstruation had started. While attending school last spring, the pains at each period were particularly severe, resulting in convulsions each time. Her physician advised her to discontinue teaching and return home, which she did. During her last menstruation I prescribed Ergoapiol (Smith), with the happy result of no pain or inconvenience whatever, and she is again attending her regular duties.

Coca as a Heart Tonic.

We are accustomed to consider the term stimulant as a something which acts as whip to goad the animal on to greater physical exertion, following

which there is a corresponding period of depression. Whether this be true or not, there are conditions where any means may be allowable, and necessary as in passing some slough of extreme emergency when the physician stakes all on the success of his measures. Properly such an application of stimulant belongs only to an alcoholic, but owing to the paucity of terms in concise definition, other substances are also pronounced to be stimulants which do not possess these equalities. Because of this association of terms in substances differing in properties they are all commonly considered as of identical action with alcohol. Cocoa is therapeutically classed as a nervous-stimulant, but, unlike any other substance, its use is not followed by depression. The action of Coca is unique. Primarily it affects the cerebral cells but with this it has a curative influence on the blood, freeing the circulation from waste, and, because of this rendering the possibilities for repair in every organ of the body favorable.

Owing to the subtle action of Coca in the muscular structure, it has rightly been advocated in disease of the heart associated with muscular deficiency. Unlike digitalis it does not simply increase muscular power, an effect which in certain cases might be a disadvantage, but by a chemico-physiological change induced in the muscular substance it aids toward repair, a process which is augmented through a purified blood stream. The ideal of a tonic-stimulant the use of which tends to the permanent betterment of any depressed condition, is presented in Vin Mariani, which embraces the true qualities of the whole Coca leaf, selected under special facilities, and scientifically preserved in a mild and wholesome wine.

I have used Aletris Cordial for menorrhagia and dysmenorrhea, and find it an invaluable remedy as a uterine tonic. The alteris farinosa has for a number of years been a great favorite with me in derangement of the female reproductive organs, therefore I recommend it as a tonic in uterine troubles, as it will give satisfaction to those afflicted with such diseases.

C. A. Goshen, M. D.
Petaluma, Cal.

Cotton-Wool Sandwiches as a Protective Against Sharp Objects Swallowed.

At a recent meeting of the Section of Surgery of the Royal Academy of Medicine in Ireland, Mr. G. Jameson Johnston, according to the *British Medical Journal* of March 29, 1902, related the extraordinary case of a man who, while swimming, swallowed his metallic plate of false teeth. A slapping on the back, with the view of dislodging the errant teeth, led to dyspnœa. On his arrival at the hospital a probang was used, and the denture passed on into the stomach, where it set up severe pains at the pyloric end, which continued for some days. Mr. Johnston then hit upon the expedient of feeding the patient with sandwiches, each containing a thin layer of cotton. A week after the man's admission an aperient of licorice powder brought away the denture, encased in cotton. One gentleman expressed the fear that cotton so administered might induce obstruction. Well, so might the denture. But the cotton, as the events showed, might bring away the dangerous pointed plate in harmless form; and if it didn't, one laparotomy would do for both plate and cotton.—*Med. Age.*

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	GRAINS			GRAINS
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Calcium Sulphate	25.71113	Sulphurous Acid	(SO2)	.08514
Strontium Sulphate	.73481	Chlorine	(Cl)	7.07743
Potassium Sulphate	1.17191	Iodine	(I)	.00105
Sodium Sulphate	64.04838	Bromine	(Br)-trace.	
Sodium Hyposulphate	.11663	Flourine	(Fl)	.04665
Magnesium Carbonate	.50153	Phosphoric Acid	(P205)	.00875
Calcium Carbonate	5.08299	Nitric Acid	(NO3)	.41406
Strotium Carbonate	.13413	Carbonic Acid	(CO2)	6.60976
Iron (ferrous) Carbonate	.39715	Lime	(CaO)	13.43569
Lithium Chloride	.01399	Strontia	(Sro)	.51319
Sodium Chloride	11.68057	Magnesia	(MgO)	2.77594
Sodium Bromide traces		Iron	(FeO)	.24869
Sodium Iodide	.00122	Potash	(K2O)	.63333
Sodium Arsenate	.00198	Soda	(Na2O)	34.17817
Calcium Fluoride	.09564	Lithium	(Li)	.00234
Calcium Phosphate	.01168	Alumina	(A12O3)	.03499
Magnesium Nitrate	.49512	Silica	(SiO2)	.67648
Alumina	.03499			
Silicic Acid	.67648			123.68326
Carbon dioxide, combined with Mono-Carbonates	2.68321			
	120.92846			

In general terms I would place this water under the purgative water; this class embraces the celebrated water of Pullna, Bohemia, Friedrichshall, Germany, and Carlsbad, Bohemia, though your water is considerably milder in its action than either of the above waters and *I think on that account preferable.*

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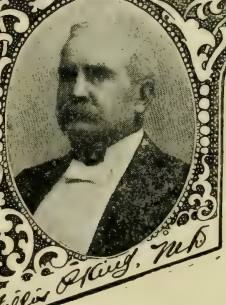

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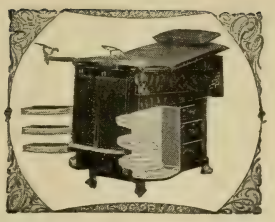
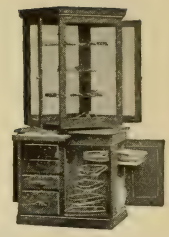

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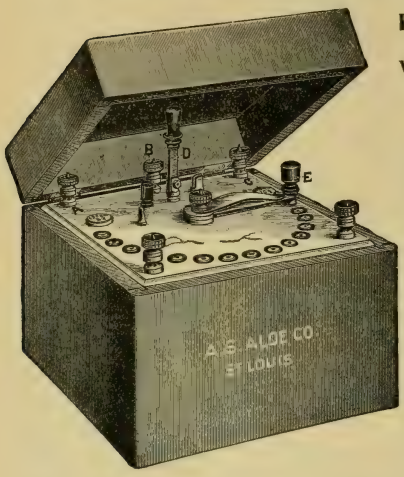

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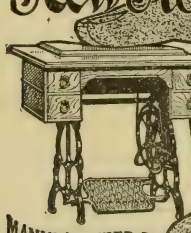

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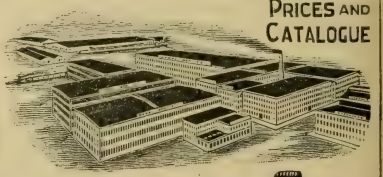

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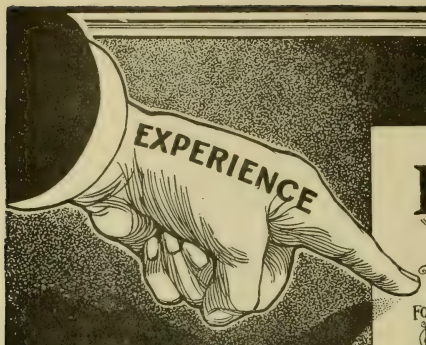

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A Monthly Journal of Medicine and Surgery.

L. XLVIII. CHARLOTTE, N. C., NOVEMBER, 1902. No. 11

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EDITORIAL.

RE-STUDY OF AN OLD QUESTION.

Dr. Herman Spalding, chief medical pector of the Chicago Board of alth, makes a plea for a restudy of protection afforded against small- by vaccination, with new statis-, derived from accurate sources. ere can be no doubt that such an umulation of new data will be of at service at the present time. While prevention of variola by vaccina- has been as thoroughly demonstra- in the past as any medical ques- ever will be, the opponents of this thod are ever active and the usual ay of statistics which are quoted in defence, convincing as they should have in a way lost effect from too at a familiarity. The truth of this stion of vaccination can be shown from an accurate history of the experience of any city in the country during the last few years, as forcibly as can be done by any older or foreign statistics.

Dr. Spalding, like other men in similar positions, has found that the so-called instances of the properly vaccinated, as to time and manner, developing smallpox, has in no case been proven, the subjects being unable, on careful inspection, to show a recent and typical scar. He regards vaccination, repeated until the susceptibility to vaccine is exhausted, as an absolute pre-ventive of variola, no matter what amount of exposure has taken place.

The fact that there are a few dissenters to this proposition, only proves to his mind as it must to others who do not take a strabismic view of the ques-

tion, that there are and always will be people who dissent to any proposition, no matter how potent it may be to the mass of mankind.

The Board of Health in Chicago got out the following "vaccination creed," which was posted in the boarding houses and other public places of that city, and by request of some of the railroad companies, in their stations:

1. That true vaccination—repeated until it no longer "takes"—always prevents smallpox. Nothing else does.

2. That true vaccination—that is, vaccination properly done on a clean arm with pure lymph and kept perfectly clean and unbroken afterwards—never did and never will make a serious sore.

3. That such a vaccination leaves a characteristic scar, unlike that from any other cause, which is recognizable during life and is the only conclusive evidence of a successful vaccination.

4. That no untoward results ever follow such vaccination; on the other hand thousands of lives are annually sacrificed through its neglect—a neglect begotten of lack of knowledge.

DR. ADOLPH LORENZ, OF VIENNA.

No medical man of foreign parts, who has visited our shores, seems to have sprung into such sudden newspaper notoriety as Dr. Lorenz. It seems an open secret that he came to treat a case in one of the Armour families, receiving therefor the largest single fee ever paid a physician in this country. His special skill became so widely celebrated that it is said he is beseiged by hundreds in all walks of life, who piteously invoke his aid, in the case of the stupenduous compensation. It is also stated that the Chicago Board of Medical Examination insisted that Dr. Lorenz was practicing medicine wi out the certificate of examination. T he did successfully. So much for t press accounts.

The Journal, of the American M ical Association has the followi statement regarding Dr. Lorenz:

"Dr. Adolph Lorenz, professor orthopedic surgery in the University Vienna, Austria, who comes this we to Chicago on a professional erra has a world-wide reputation as one the greatest authorities in his special Beginning his professional career as a sistant in the surgical clinic of Pr Albert, he was obliged to give up ge eral surgery on account of an intract ble eczema of the hands caused by t antiseptic solutions in constant use the clinic. Influenced by his chief, w had given considerable attention to sc liosis, he returned to orthopedics a first became more generally known his prosecution and completion of t studies begun by Prof. Albert, on th same subject. Prof. Lorenz is be known as the author of a method bloodless reduction of congenital h dislocation—to treat a case of which his present errand. Few perhaps kno that before he developed this treatme he practiced the cutting method Hoffa and added important details its technic. Besides these better know works he has contributed to other c thopedic problems and devised a nu ber of deformity apparatus."

THE HEALTHY APPENDIX.

The public and not a few medic men regard the appendix as an entire useless organ, the possession of whi may be considered an unmixed ev The surgeon who is about to open th abdominal cavity for other causes not infrequently requested by the p

ent to take advantage of the opportu-ty and remove the objectionable or-n. There is perhaps no disease that s achieved such an amount of sensa-onal advertising as has appendicitis, nsequently it has become a nightmare the average individual who is anx-us to part company with the offend-g member under favorable circum-nces.

Whether the surgeon should feel nself justified in removing a healthy pendix during the course of an oper-on for other causes is interestingly scussed in a recent paper by Dr. ward Kelly. In answer to this ques-n put to some eighty prominent sur-ons of the country, he received some enty replies. The majority of these licated that most surgeons took a nservative view, declining to inter-e with a normal appendix when open-g the abdomen for other reasons. ite a respectible minority, however, re in the habit of seizing the occa-n to free their patient from the pos-ility of future trouble in this direc-n, and removed the appendix, even ugh healthy. Dr. Kelly draws the llowing conclusions from the answers eived, and as a result of his own ex-iences:

1. The appendix should always be amined and its condition noted when-er the abdominal cavity is opened any reason, provided no additional k is involved.

2. The opinion of the majority of geons in this country is against the noval of a perfectly healthy appen-, 44 to 26 being the proportion wn in my investigation.

3. The opinion of the large majority surgeons is in favor of removing an pendix which is even slightly adher-, to other structures, 60 to 7 being the proportion shown in my investigation.

4. The fact that the appendix is normal in appearance does not prove that it contains no fecal concretions, for I have found them in a number of instances. Their presence is sufficient reason for the removal of an apparently healthy appendix.

5. After removal of the right ovary the stump should always be covered with peritoneum in order to prevent the risk of adhesion to the appendix. A long and free appendix should invariably be removed.

SUGGESTED CONSTITUTION AND BY-LAWS FOR STATE SOCIETIES.

The American Medical Association committee on Constitution and By-laws, which was appointed to co-operate with the organization committees from the various State societies, has drawn up a Constitution and By-laws which are to be used as a model for new State Constitution.

This committee desires it understood that their action is entirely suggestive, and that it will be necessary for each State to make such modifications as local conditions may necessitate. The general principles recommended to the American Association have been embodied in this newly drawn constitution. These principles are sound and practical and if adopted with local modification, will bring about a more uniform and effective organization of the State societies.

This committee recommends that the word "association" apply to State organizations, and the word "society" apply only to county bodies.

One delegate is allowed to every hundred members. This high appor-

tionment is made so that the larger county societies shall not have a controlling power in the "House of Delegates," which is the legislative body of the American association.

The following recommendation in reference to the "council:"

"This council is to be composed of men from various parts of the State, so that each part shall be fairly represented in this important body. It pre-supposes the division of a State into say ten districts, and in each of these districts a distinct society may be formed if it is thought best. Each individual councillor will have certain definite duties to perform. First, he is the censor for his district; all disputes between members, between societies and between societies and members should be referred to the councillor and it will be his duty to settle such disputes if he can. It will be his duty to organize societies in counties in which none exist and to stimulate to active work societies now existing, or that may be created, and to visit each society at least once annually. If the right men are selected for the position of councillor, it will probably do away with the necessity of employing a paid organizer. The committee is earnest in its belief that such councillors should be paid their actual expenses in this work, believing that it will be money well invested from a financial point of view, and especially believing that medical men ought not to be asked to do such work for nothing and pay their own expenses. The majority of the committee believe that this council should have greater duties than have been given in this constitution; that it should be also the executive committee of the State society—in fact, that it should act for the State society during the interval between meetings. This suggestion is made, but will be noticed that it is not incorporated in the by-laws. The committee believes that there should be a more or less continuous body in each State association. The probability is that the House of Delegates may be made up of entirely new members some year from what it was the year previous, and hence the necessity of a continuous body in the House of Delegates. The council is therefore made a part of the House of Delegates and its members are elected for five years. It is asked that this idea of a council be given special thought by the committees on reorganization representing the State societies.

"The committee regards the creation of such a council made up of the truest, most unselfish, most willing, and most capable physicians in each State as of the very highest importance in the scheme of perfected organization. The council can, if in good hands, accomplish wonders for the profession. We beg that each State will give this innovation its most serious attention. It may be added that in those States in which it has been tried in part it has worked exceedingly well."

In reference to modification of the constitution and by-laws:

"Attention is asked to the fact that the constitution is made very short and that it contains the essential features of the new mode of organization. The by-laws, on the other hand, contain the superstructure of regulations that have been built upon the constitution as a foundation. The committee believes that the provisions of the constitution are fundamental, and recommends that the State societies adopt them with just as little change as may be necessary to adopt them to local conditions. In the

by-laws the committee has included much that is perhaps to be regarded as suggestive and more that is educational in its purpose. It follows then that the by-laws may be considerably modified in each State without damage to the uniformity of State organization which the American Medical Association has declared to be desirable.

"There are sections in the by-laws that can be left out without difficulty, and beyond doubt many of the State committees will be able to suggest points that should be covered in the by-laws in order that the medical profession may be harmoniously and strongly organized. The committee especially requests that each State committee, after full consideration of the documents herewith submitted, will transmit to this committee promptly those modifications which to them appear desirable. In this way the work of organization may be kept going with equal facility and simultaneously in all parts of the country, and by this means each State can be given the early opportunity of taking under consideration the ideas and plans of its near and distant neighbors. It will then be perceived that this committee regards it as highly important to the general welfare that all the State societies should in all things work in mutual harmony, and should be furnished the facilities for the ready intercommunication of views. Up to this time each State medical society has been an isolated community working along similar lines, but each compelled to meet the same difficulties without the great advantage of having at hand the record of experience of sister societies under like circumstances. The new scheme of medical organization has as one fundamental principle the federating together of the State societies. The execution of this ideal will never be of greater service than under present conditions, when each State is anxious to perfect its mode of organization."

This report is conservative and discreet in that it takes especial care not to encroach upon the rights of the State societies; it is to be hoped that every member of the profession will give his voice and influence toward this attempt to unify the great American organization.

Epistaxis—Its Causation and Treatment.

Gordon King, in *New Orleans Medical and Surgical Journal* for April, classifies the causes as: (1) Traumatism. (2) Local nasal disease. (3) Constitutional conditions. (4) Vicarious function. Under treatment are mentioned pressure, followed by cauterization of the bleeding point, the use of 870 solution of antipyrin as a spray, etc., while great stress is laid upon the value of a solution of adrenalin 1-1000, in sodium chloride solution, this produces a local ischemic effect lasting for half an hour and upwards, during which time the point of trauma can be cauterized with electricity, silver nitrate or chronic acid. As 20 to 30 minims of this solution also acts as a powerful heart stimulant when administered internally, a combination of local and systemic treatment is often a most happy one.—*Texas Med. Jour.*

Descriptive.

Sophomore students at Syracuse Medical College have the following yell: "Well man, sick man, dead man—stiff! Dig 'em up, cut 'em up—what's the diff? Humerous, tumerous, blood and gore! Syracuse Medicos, 1904!"

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ORIGINAL COMMUNICATIONS.

Fevers and the Microscope.*

By Hughes B. Hoyle, M. D., Davidson, N. C.

Without doubt the greatest achievement in medicine in the last quarter century is the discovery of the malarial organism and the method by which it is introduced into the human body. For l y putting this knowledge into practice we can absolutely control this most w ide-spread disease.

That malarial fever in all its forms is causel by the presence of an ameba in the blood is a fact accepted by all scient fic physicians; that the mosquito is the agent by which the patient is inoculated is equally well established.

But it is not the purpose of this paper to give the history of these discoveries as interestingly as it may be, nor to eulogize the patient investigators who have given this knowledge to the profession, though they deserve the highest praise that could be heaped upon them, but to tell of the value of microscopical methods in the diagnosis of the common fevers such as we have in North Carolina.

There are three distinct varieties of the Malarial ameba, the Tertian, Quartan, Estivo-Autumnal.

The Tertian and Quartan organisms are so nearly alike that an ordinary observer cannot distinguish them except by the length of time required in their development, the Tertian requiring 48 and the Quartan 72 hours to mature.

The organism of Quartan and Tertian Fever begin their existence as small hyaline bodies inside the red blood corpuscle.

In the fresh unstained specimen they may be seen as small clear-looking bodies, either round or irregular in shape, having ameboid movement. They soon begin to develop a pigment which

*Read before North Carolina Medical Society, Wilmington, N. C., June, 1902.

ay be seen in the centre of the organ-
m.

Then sporulization takes place by hich the ameba is divided into 15 or segments or spores which develop turn into full grown ameba. This cle is completed in the Tertian or-anism in 48 hours, in the Quartan in hours.

The Tertian form is much more com-on than the Quartan at least in my perience, the ratio being twenty to e.

There is rarely any difficulty in a agnosis of the Intermittent fevers en without the blood examination. aving to distinguish it from Septic fections and the Intermittent fever of berculosis the microscopical examina-on of the blood is of value, and in illful hands never disappoints by giv-g an uncertain result.

The organism of Estivo-Autumnal ver differs from the organism of the termittents by being smaller in size, d having very little pigment.

There is also a form in shape of a escent which is peculiar to this ecies. This form is as a rule extra-rpuscular.

Unfortunately this parasite is not al-ays easily found in continued Mala-l fevers, but of course when it is und it is a certain method of diagno-s.

This organism is invariably the cause Pernicious Malarial fever.

For the diagnosis of typhoid by eans of the Microscopic we depend al-ost entirely upon the Widal Serum eaction.

While of course this test is not abso-tely conclusive, still it is a very valua-e adjunct to our other resources, and hen taken in connection with the ab-sence of the Malarial parasite it should be regarded as absolute.

In proof the value of these procedures I could report 58 cases Typhoid in which the serum test was made with negative results in only two cases, and quite a large number of cases of Malarial Intermittent in which the parasites were found without exception.

However, I cannot give such a favorable report in Remittent Malarial, finding the parasite in only about 80 per cent. of the cases examined.

I will report three cases that I think deserves special mention. One is a case of mixed infection, the second a case of a typical malarial which was wrongly diagnosticated Typhoid and the third is Pernicious Malarial.

1. E. S., female age 12, had "dumb chills" for several weeks before calling a physicain. When first seen 10 a. m., September 2d, temperature 102, pulse 90, abdomen tympanitic and tender, no rose-spots, constipated, tongue brown-fur. September 3d, 10 a. m., temperature 104½, other symptoms as before. Examined blood and found the malarial parasites. Exhibited quinine sulphate in 3 grain doses four times a day after a calomel purge. September 4th, temperature 102½ and bowels very tender, tongue still brown coated .

September 5th, temperature 103; September 6th, 5 p. m., temperature 103; September 7th, 10 a. m., temperature 102; 5 p. m., 103, rose-spots on abdomen, made serum test and got a good clumping reaction.

The case progressed like an ordinary case of typhoid and convalescence was begun the fifth week.

This, I believe, was a genuine case of typhoid malarial fever.

2. L. F., female, aged 20. Seen first August 8th; had been feeling bad for

several days, temperature 100½, pulse 80; abdomen tender. August 9, 10 a. m., temperature 100, other symptoms as before; 6 p. m., temperature 101, slight diarrhœa. Made serum test with negative results. The symptoms continued to simulate typhoid, the temperature gradually rising until it reached 104 the second week. No rose-spots appeared on abdomen, which shook my faith in the diagnosis. Made examination of blood and found the Estivo-Autumnal parasite; exhibited quinine sulphate, 5 grains every 4 hours after a purge of calomel, podophyllin and soda. August 20th, temperature was normal and convalescence was established.

3. R. C., male, aged 24, seen September 19 after a "convulsion." Patient comatose, temperature 106, diagnosis uremic poison. Later I learned that patient had been having chills and the diagnosis was changed to pernicious malaria.

Gave 40 grains quinine sulphate per rectum, which was passed after 20 minutes. Repeated dose in one hour.

The patient developed a remittent fever which resisted quinine in heroic doses for two weeks. The temperature ranging from 101½ to 104.

I made an examination of blood the second day and found the Estivo-Autumnal parasites in abundance.

Malaria and Pregnancy.*

By A. B. Greiner, M. D., Richmond, Va.

Malarial fever needs no introduction to you; nor, I dare say, do you care about meeting it when it persists in making itself known in a pernicious way. Malaria is essentially a pathologic condition and one that proves sometimes to be a very stubborn one if we are to consider and believe that the mortality attendant upon it, in some malarial regions, is quite appalling. Pregnancy, on the other hand, we may consider a physiologic process, one that needs no lengthy treatise to establish it as such; and when not complicated by some pathologic condition runs a well defined physiological course and terminates in a physiological way. We would, then consider malaria and pregnancy antagonistic to each other; not only in a definitive way, but also because they run an essentially different course and end in a far different way. With the light of modern investigation into the cause, morbid anatomy, course and treatment of diseases shining in full force upon the result of our researches, we are compelled to dissent from an opinion formerly expressed, that "the treatment of intermittent fever in pregnancy is the same, so far as antiperiodics are concerned, as if the patient were not pregnant; and there need be no hesitation in giving quinine, for example, and giving it freely, unless some idiosyncrasy forbids its use."

From the statistics of abortion in malarial countries, it is conclusively shown that abortion occurs more frequently than in non-malarial countries, and we have therefore to accept the fact that intermittent fever in pregnant women predisposes to abortion and premature labor, consequently these two processes have been referred to as antagonistic. This antagonism manifests itself on the part of the malaria by tending to abortion and premature labor; and on the part of pregnancy by conferring upon the women a lessened tendency to contract malarial fever. How it is, if it is really the case, that pregnancy renders one less liable to mala-

*Read before the Richmond Academy of Medicine and Surgery.

rial infection, may perhaps be explained by the fact that the pregnant woman is not so much exposed to those factors which, at one time or another, have been recognized as causes of intermittent fever. The woman, on account of her sedentary life in doors, is not exposed to so great an extent to the contaminating air, if we are to regard malaria as a true miasmatic disease; nor to the infecting anopheles, if it is the only true cause. The cases of malaria complicating pregnancy, which I have seen, ran about the same course as to the recurrence of the chill as do the cases of uncomplicated intermittent fever. Some observers claim that the fever comes to be of a remittent instead of an intermittent type in cases where these two conditions are associated. The specific anti-malarial remedy which has been for so long a time administered, is practically of no antipyretic value in conditions of fever due to any other cause, unless given in exceedingly large doses; and as this drug is so satisfactory in the successful treatment of malaria, it is the one of which we first think when seeking a remedy to be given, even in cases complicated by pregnancy, for it does prevent the chills and abate the fever. Those who are in a position to speak authoritatively concerning the physiologic action of quinine, say that it is used for its stimulant effect on the uterus in cases of uterine inertia because it does stimulate the uterus to more violent contractions. The opinion has been expressed that the drug does not initiate uterine contractions, but stimulates after contraction has begun. I am inclined to the belief that quinine does, in some cases, initiate contractions in the pregnant uterus; and this conclusion I have reached after observing that in some cases of pregnancy, abortion was very promptly produced in women who were only a few weeks pregnant, and in whom there was no other ascertainable cause for the beginning of such contraction.

The predisposition to abortion observed in some women we might regard as a probable cause of initiatory contraction, yet why should this factor become operative after the administration of quinine if the quinine had nothing to do with it? Some explanation other than mere coincidence must be given for this. A recent writer has advanced the theory that the malaria is the potent cause of the abortion. While I regard the disease as a predisposing cause, yet I cannot understand why abortion should be delayed until the dose of quinine has been administered. Just how this drug exercises such stimulant effect on the uterus I am not prepared to explain, unless we are content to say it stimulates involuntary muscle fibre. The women who seem most prone to abort after an anti-malarial dose of quinine are those who have previously done so, and in whom the various causes of abortion are apt to be successful.

I have seen one case in which abortion followed within twenty-four hours the administration of a 10-grain dose of quinine. Some writers say that pregnancy predisposes to an outbreak of chills and fever in those who have previously had such, and in whom at the time of impregnation the malarial poison is quiescent. But, whatever be the cause of malarial fever and the tendency for pregnant women to contract it, it is quite often met with and must be treated; treated in a very cautious manner if we are to leave undisturbed the pregnancy. It has been advised that

one of the bromides be administered along with some salt of quinine in the treatment, the object of the bromide being clearly to depress the nerve centres that have to do with stimulation of the uterus. Others have advised black haw for the same effect. This plan of treatment is frequently carried out successfully, and with absolute quiet on the part of the patient nothing more can be desired.

The object of this article is not so much the recounting of old methods of treatment in the management of such cases, but while offering nothing new, to emphasize the efficiency of a comparatively new drug which has come forward prominently, and justly so, in the treatment of malaria when pregnancy complications. A few people have an indiosyncrasy to quinine and therefore cannot take it in quantity sufficient to combat the malarial toxines. Undoubtedly, in some cases pregnancy is a known idiosyncrasy and one that should be kept in mind. It has been the experience of some practitioners that quinine administered for its stimulant effect to the uterus during labor, predisposes to postpartum hemorrhage. This is a complication for which every one of us has a natural dread, and if it does cause such hemorrhage, it is our duty to discard it or give it cautiously and be alive to the possible result. It is not my purpose to underestimate the value of quinine, which has an established reputation as a specific in intermittent fever. Some other drugs have been used for their antiperiodic effect, but none so successfully as quinine.

The desire then, is for some agent that is sufficiently powerful as an intiperiodic and one that will not disturb gestation. No physician would allow his patient to suffer unnecessarily from chills and fever, even though she were pregnant, without giving her some control or some curative remedy, although there would be danger of interruption of the pregnancy. The disease is in itself an evil, and abortion from the use of drugs is not a good thing and we are often forced to decide which would prove to be most disastrous. As a curative agent for intermittent fever methylene blue within the last few years has been advised; and while not so powerful as quinine in an antiperiodic way, yet undoubtedly has been proved to be very useful. This drug destroys the plasmodium malariae and seems to be about as efficient as quinine in this particular, judging from clinical results, but this I have not determined from blood examinations. It had better be administered several hours before the time for the paroxysm and continued some hours afterwards, or until no organisms are to be found in the blood. The only objection to its use so far as I have been able to judge, is its intense irritant effect on the stomach if given in doses exceeding three grains. Of course, we may look for prompt and complete evacuation of the stomach but there is no disagreeable after effect. We may consider the dose to be from one to five grains, the maximum to be given to those who are not so susceptible to stomachic irritants, or to be given after meals. Methylene blue is eliminated by the kidneys and the urine is colored an intense blue. I have made use of this drug in cases of malaria not complicated by pregnancy, and in those people who do not seem to be greatly benefited by quinine, and while my experience in this particular has not been extensive, yet there were good results attending its use. Without entering into detail as to individual cases of ma-

laria not complicated by pregnancy, and in those people who do not seem to be greatly benefited by quinine, and while my experience in this particular has not been extensive, yet there were good results attending its use. Without entering into detail as to individual cases of malaria, and pregnancy and the treatment thereof by this remedy, suffice it to say that in the few cases which I have treated, the drug has been a very satisfactory one and it is recommended for your consideration.

DISCUSSION.

Dr. Wm. S. Gordon said that quinine, in small doses, was certainly a cerebro-spinal tonic; an appetizer, stimulating the digestive organs; a bacteticide and destroyer of the plasmodium of malaria. Taking advantage of its vaso-motor influence upon the brain and spinal cord, some persons dissipated with it. In large doses, it was depressant. Many patients while menstruating, had their flow increased by its use. On the other hand, Playfair stated that quinine expedited labor in the second stage, often removing the necessity of employing forceps. Dr. Gordon said he did not fear hemorrhage from its use in labor. It stopped after pains by stimulating the uterus to expel the clots. Stimulating the parturient center on the one hand, as well as the menstrual or vaso-dilator center on the other, one could easily understand how it increased contractions in labor, and the flow in the non-gravid uterus. He believed that quinine could initiate labor pains, produce abortion and prevent postpartum hemorrhage.

Dr. H. H. Levy said his experience allied exactly with that of Dr. Gordon. He had seen quinine institute frequent and forcible contractions of the uterus after they had ceased, in the second stage of labor; and in no instance that he could recall, had he encountered postpartum hemorrhage as a result.

Dr. Levy reported the following case: A young, healthy, married colored woman, several years ago, sent for him, threatened with premature labor at about seven and a half month. She informed him that she had been taken with chills and that a physician attending her employer had prescribed quinine. The woman had taken but twenty grains, but she proceeded to give birth to a dead and premature infant. A year later she had a similar experience as to chills and subsequent fever, but took no quinine, and again gave birth to a dead infant of about eight months. Dr. Levy making an investigation as to the cause of these premature labors, found marked fatty degeneration of the placenta. His observations of the clinical aspects of the case made him disbelieve in a malarial basis. When the woman again became pregnant, she reported to him and he prescribed her, taking seven and a half grains of potassium chlorate three times a day. This she did throughout her pregnancy, and was delivered of a healthy child at full term. She had no chills or fever at any time during this last pregnancy, though taking no anti-malarial remedies.

Dr. Greiner, in concluding the discussion, said that once he had given to a patient (who he did not know was pregnant and who had aborted before) suffering with malaria, ten grains of quinine. The next day she again aborted. Not being able to attribute it to anything else, he came to the conclusion that the quinine had done it. He did not know how methylene blue stimulated contractions in labor unless by acting on the unstripped muscular fibres. One practitioner who had given it had

discontinued its use because he feared postpartum hemorrhage as a consequence. In small doses it was a tonic and would cause uterine contractions if these were previously initiated by other remedies. The doe necessary to originate contractions was so large that there was danger later, that it might depress the vaso-motor centre and produce postpartum hemorrhage. His experience with methylene blue in malaria with pregnancy had been satisfactory In cases uncomplicated with pregnancy, it had also been satisfactory apparently. The dose should not exceed five grains, but when it produced irritation of the stomach, it was reduced and given immediately after meals. Several hours were to be allowed for absorption. It acted as quickly, but not as powerfully as quinine. He continued its use for five or six days only, because of its effect upon the stomach and the discoloration of the urine.

Pathology and Treatment of Gall-Stones.*

By Louis Frank, M. D., Professor of Abdominal and Gynecological Surgery in Kentucky University Medical Department; Consulting and Visiting Surgeon to the Louisville City Hospital; Member of the Surgical Staff of the John N. Norton Infirmary, etc., Louisville, Kentucky.

According to careful statistical studies by Robson, Kehr, Brockbank, V. Reckling-Hausen, and others, gall-stones occur in 8 per cent. of all individuals. In Strasburg it is said they were found in over 12 per cent. of all bodies coming to autopsy. Kehr believes that two million of the inhabitants of Germany have gall-stones or other disease of the gall-bladder.

If this be true, and we have no reason to doubt it from our observation and experience as practical surgeons the attention of the general profession should be called to the disease, to its dangers, to the symptomatology, and especially to the beneficent reults of operative intervention for its cure, for there is hardly an operation in surgery yielding such grateful results to the patient.

If we exclude congenital malformation and cancer, all diseases of the gall-bladder may be looked upon as of bacterial origin, though the coincident occurrence of cancer and gall-stones is so frequent that the latter has been looked upon as a causative factor in the production of calculi, which I think is a reversal of the true relationship between the two conditions. Cancerous diseases render the gall-bladder more liable to infection, and in conjunction with the slightest obstruction to the outflow of bile there are present the two essential factors in the production of stone, viz., stasis or stagnation of bile in the gall-bladder, and bacteria to cause its decomposition. And while these are the potent factors in calculus formation, the latter, without the former, may be looked upon as sufficient. To Naunyn, I believe, we are indebted for the first positive assertion of this relationship, though Louis in 1829 noted that gall-stones and gall-bladder disease was much more frequent after typhoid fever than after any other acute infectious disease.

In the light of modern pathology and bacteriology, we may look with certainty upon bacterial infection as the sole cause of gall-stones. The micro-organism may be the typhoid bacillus, the bacillus coli communis, bacillus Fraenkel-Wischelbaum, the ordinary pus producers, and possibly a few others. The direct communication between the gall-

*Author's Abstract.

bladder and the intestinal canal, the ichness of the latter in bacteria, and he great frequency of interstinal disurbances, the direct flow of blood hrough the portal vein from the intesinal canal into the liver, would easily xplain this.

"Bacteria possibly infect the bile in wo ways: (1) An ascending infection hrough the biliary passages from the luodenum. (2) A hematogenous inection. Bacteria enter the portal cirulation from the diseased portion of he intestine, and are eliminated by the ver and pass into the bile.

"In typhoid fever the evidence seems o point to infection through the blood. he typhoid bacillus is nearly always ound in pure culture in the gall-blader. If infection took place through he biliary passages we should expect o have a mixed infection with the acillus coli or the streptococcus, as Iiyaki has shown that these bacteria, t least in animals, are generall present in the lower end of the ductus cholochus."

Futterer has demonstrated that icro-organisms which enter the portal ein begin to be excreted by the liver hrough the biliary channels within a ew minutes. It would seem as if the pecific bacillus must again entrance nto the circulation in every case of enric fever, as Neufeld has called attenon to the association of the typhoid acillus with rose spots, and his obserations have been confirmed by Cuschan, Rumpf, Scholz and Krause in ermany, and in America by Richardon and workers in other laboratories.

"Typhoid septicemia is not longer rearded as an extremely rare condition. uerbach and Unger have obtained he bacillus typhosus from the blood uring life in seven out of ten cases, and Schottmuller in forty out of fifty cases.

If we regard every case of invasion of the gall-bladder by the typhoid bacillus, without symptoms and without pathological changes, as a case of cholecystitis, then, as we have shown, nearly every case of typhoid is a case of cholecystitis. This is confusing and unreasonable. We should limit the term cholecystitis to those cases in which there is clinical or pathological evidence of inflammation of the gall-bladder.

"The theory advanced by Naunyn, in 1891, that gall-stones are due to a catarrhal inflammation of the gall-bladder induced by micro-organisms, has been generally adopted. It is supported by experimental and bacteriological evidence. Among recent investigators Chauffard appears as the sole supporter of the old theory of a lithiac diathesis.

"According to Cushing, Dr. Welch in 1890 obtained living colon bacilli from the centres of gall-stones, and suggested that they might bear an etiological relation to the formation of biliary concretions.

"Fraenkel and Krause, and V. Mieczkowski have shown that the gall-bladder in general disease conditions rarely contains micro-organisms. Yet in cholelithiasis it is almost always infected. Petersen found bacteria present in the gall-bladder in thirty-six out of forty cases and V. Mieczkowski in eighteen out of twenty-three. In all of the infected cases the bacillus coli was isolated, usually in pure culture. Other observations tend to show that the bacillus coli is the micro-organism most frequently associated with biliary lithiasis.

"Dufourt refers to nineteen patients with gall-stones whose first attack fol-

lowed typhoid fever, in twelve cases within six months.

"Cushing reviewed the cases of cholecystitis associated with gall-stones operated on at the Johns Hopkins Hospital, and found then ten out of thirty-one gave a previous history of typhoid fever.

"Richardson observed large clumps of typhoid bacilli in the bile, suggesting a gigantic Widal reaction in the gall-bladder. He put forward the theory that these clumps of agglutinated bacteria serve as the starting point for the formation of biliary calculi.

"Experimental researches support the view that the typhoid bacillus induces gall-stone formation. Gilbert and Fournier producetd biliary calculi in animals by the injection into the gall-bladders of attenuated cultures of the typhoid bacillus. Richardson produced a stone about 7 mm. in diameter by injecting a culture of agglutinated bacilli into the gall-bladder of a rabbit. Cushing was successful in one case in producing small biliary calculi by an intravenous inoculation of the bacillus typhosus.

"Mignon believes that the formation of stones ceases with the death of the bacteria. Old stones are sterile."

If we expect to diagnose gall-stones by the presence or absence of jaundice, we will overlook 80 per cent. of the cases. The important symptoms are those ordinarily looked upon as indicating indigestion or dyspepsia. In the absence of typical colic (which is wanting in most cases) the digestive disturbances, especially with pain at the costal margin, are most important symptoms, and when accompanied by tenderness on pressure at a point about midway (or one-third of the way) between the umbilicus and the tenth costal margin, the diagnosis is almost absolutely certain.

In the aged pyrexia may be the only symptom, and when irregular, and in those with healthy urinary organs should make one very suspicious.

The treatment of gall stones contemplates primarily and principally drainage of the gall-bladder, as infection and inflammation give rise to the symptoms. In other words, the colic and disturbances are not dependent upon the presence of stone, but of inflammation, the stone being of secondary importance. This is shown by the cessation of trouble in those cases in which drainage is resorted to even with stone impacted in the cystic or common duct. Removal of the stone is usually to be looked upon as only an incident in the operation, except in those cases where it may be in the hepatic duct, when its removal is the first consideration; or, when it blocks the common duct in the cases where anastomosis with the bowel or the establishment of a fistula with the outside is impossible or undesirable; or when the removal of the viscus is necessary or indicated.

My own opinion is that cholecystectomy, other things being equal, should be the operation of choice, in all cases with a free common duct, or where it is possible to remove a stone in this locality.

With occlusion of the cystic duct this may be done just as easily and with just as certain promise of a cure, and is probably better than incising the duct and removing the stone. Suture of the cystic duct or of the common duct has never appealed to me. It is unnecessary, lengthens the operation, and one gains nothing by so doing.

If the common duct is occluded and the possibility of making it patent, not

easible, then cholecystenterostomy is he operation of choice and preferably he anastomosis should be with the duo-enum.

We should bear in mind that we are ealing with an infected organ or tis-ues, and for that reason I would, with-ut some contraindication, advocate reatment along the same lines as we pply to that other useless, dangerous nd troublesome structure, the appen-ix vermiformis.

Literature: *Courvoisier; Naunyn; rockbank; Robson; Kehr; Pratt; merican Journal of the Medical Sci-nces, November,* 1901.

The Baby.

I would like to urge doctors to pay ore attention to the eyes of the new-orn. Not only to cleanse them care-ully, but to see that the nurse does not ake them into a strong light.

In my last fifty cases of confinement, have been careful to instruct the nurse keep the room darkened. I find that e babies sleep better, are better na-ured, and consequently grow and de-elop better.

The following facts and theories ave given rise to the above conclu-ons.

The baby's eyes have never had the imulation of light. No wonder it inks and blinks when the first rays f light strike the retina. It is pain-l, as we know from experience, for a rilliant light to strike the eyes, after ey have been in darkness. We know at a bright light will cause a con-nctivitis, even in grown people. It ill also cause headache and I have so seen cases of indigestion caused by xcessive use of the eyes. Now can we ame the baby for crying when we eep it in the light? Its eyes hurt, head aches and possibly this causes chronic eye trouble, that is only recognized years after. Specialists, in examining the eyes of school children, tell that more children at the present time suffer from various forms of eye trouble, than of preceding generations. True, we have electric lights, gas lights, and various forms of kerosene lamps, all making bright lights; also the children read and study more now than they did in previous times; but it would not be saying too much to blame some of their eye trouble to the bright light of the confinement room. The untutored savage takes special care to protect the eyes of the new-born.

The candle and small windows of the olden times were better for the eyes of the child than the brilliant electric lights and bay windows of the present.

Again, let me urge doctors to protect the eyes of the new-born babe, and said babes will be better in every way.

Again, I want to enter a protest against bathing the child immediately after birth. It matters not how warm the room is, when the child is washed; it shivers and shakes. It comes from a temperature of 100 degrees suddenly into a room of a temperature possibly about 70 degrees, a sudden fall of 30 degrees. Then the nurse washes it, tending to lower its temperature more. Would it not be more sensible to wipe the baby dry and oil it, protecting the body and adding heat to it?

The immediate bathing of the child is the source of much trouble. Wait twenty-four hours. Give the little one time to adapt itself to ordinary temperatures before you give the bath. Try it on yourself, doctor, and see how you like it. Try it on the babies, and I can promise you that they will thank you for your thoughtfulness.—*J. W. Coleman in Surg. Clinic.*

Selected Papers.

Pleurisy.*

By J. T. Barbee, M. D., Jackson, Tenn.

Inflammation of the pleura may occur as a primary affection, or perhaps more frequently it is secondary to a general or local disease. Pleurisy occurs at all ages.

Chill from exposure to cold and wet is often the exciting cause of pleurisy —probably by lowering the vitality through disturbed nutrition; this gives the agents that excite inflammation a chance to get in their work. Any constitutional disturbance or even a tendency toward it, especially noted in tubercular diatheses, tends markedly to produce liability to pleurisy. Diseases of the adjacent organs, especially of the lungs, extend their inflammation often to the pleura; so also is it true of pericardial and mediastinal diseases. It may follow injuries of the chest wall and lungs. It may occur in the course of acute or chronic diseases, such as septicemia, the acute fevers, acute rheumatism, Bright's disease, some hepatic and malginant diseases.

Examination of the fluid has frequently shown that the inflammation is due to irritation of the pleural membrane by microbes; of those most frequently met with are tubercle bacillus pneumococcus and streptococcus. There can be no doubt that most dry pleurisies and pleurisies with serious effusion are due to the tubercle bacillus. McPhedran, of Toronto, says that many French observers believe that 75 per cent. of all such cases are of tuberculous origin. That a pleurisy of the kind just mentioned gets well is not evidence that it was not tubercular. "Of one hundred and one cases, of pleurisy," examined post mortem by Osler, "thirty-two were definitely tuberculous, and thirteen existed in patients having tuberculous lesions of the lungs without any definite proof of the tuberculous character of pleurisy."

Eichorst reports as follows: "The exudate obtained from twenty-three patients who had been in good health when they acquired the pleurisy, and in whom no tuberculous lesions could be detected after the most careful examination, was injected into guinea pigs. As a result fifteen of the twenty-three animals, or 65.2 per cent. developed tuberculosis, while only eight, or 34.8 per cent., remained healthy." These

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Read before West Tennessee Medical and Surgical Association, at Jackson, May, 1902.

sults indicate that nearly two-thirds of all cases of acute serous pleurisy are of a tuberculous origin. That most idiopathic pleurisies are really of a tuberculous nature may be seen from a report by Aschoff: "Of inoculations in twelve so-called idiopathic cases, nine caused tuberculosis in guinea pigs." Rheumatic pleurisy due to the pneumococcus may be primary, but is usually secondary to pneumonia. The effusion may be serofibrinous, but more frequently it is purulent. Empyema in children is most always due to this bacillus.

Streptococcus pleurisy is the typical empyema of the adult. The infection takes place directly from the lung, as from broncho-pneumonia, gangrene, abscess, tubercle or even some general septic condition.

No doubt some of our idiopathic cases are rheumatic.

The morbid anatomy of these parts is about the same as inflammation of any serous membrane. The pleura loses its polish, the fibrin thrown out forms a thick shaggy layer on its surface. If the inflammation ceases at this stage we call it dry pleurisy. It is probable in most mild cases absorption of this exudate is complete, leaving no adhesions.

The effusion may be serous or serofibrinous, purulent or hemorrhagic. The amount of fluid varies from a few drops to enough to enormously distend the chest.

Page says the more acute the inflammation the more the fibrin, the more chronic the more serum in the effusion. If the effusion is sufficient to fill the cavity, the lung is pressed into a dark mass at the root and soon becomes carnified.

The purulent effusion may first have been a sero-fibrinous one, but in most instances the exudate is purulent from the beginning, especially in the streptococcus infection. Hemorrhagic effusions are usually tuberculous, less often carcinomatous.

In long standing cases the pleura becomes a dense thick membrane. Adhesions are not uncommon, often interfering with lung expansion.

While pain and friction fremitus are the most pathognomonic symptoms of a simple acute pleurisy, a diminution of the first, the loss of this second previously existing physical sign, with diminution or loss of vocal resonance and, on percussion, a flat note and the increased or board-like resistance over the whole surface of effusion, point most inevitably to an effusion.

The general symptomatology and physical signs of pleurisy with effusion are well known. Suffice it to say that the fluid collected in the pleural sac displaces the lung and acts as a partition to intercept sound, so that over the site of the fluid the vocal fremitus is diminished of absent; so also are the respiratory murmur and vocal resonance.

Occasionally a string of adhesion or rib may transmit such sounds to some spot. Palpitation is of the greatest importance. The diminution or absence of fermitus, even with bronchial breathing, is significant. The physical signs of a much thickened pleura are much the same as with an effusion, except to a less marked degree.

In pleurisy with effusion inspection is very valuable. The expansion becomes lessened as the fluid increases on the affected side, while it increases on the well side. There is an increase in the antero-posterior diameter, and bulging of the intercostal spaces. When the

fluid rises higher than the angle of the scapula the lung becomes relaxed and we find a tympanitic note above the nipple—the skodiac resonance. The level of the fluid usually alters with the change of position, if there be no adhesions. The whispered voice, it is said, may clearly be transmitted through serous but not through purulent effusions; this is Bacelli's sign. Exploring the chest with the aspirator affords the best means of determining the existence of a fluid and its character.

In considering the diagnosis I will suppose the general history known, and will speak more of physical signs. The difficulties belong chiefly to the earliest and the latest stages. In these affections there is no fever and the pain is more marked along the course of the nerves. In the latter stages the diagnosis is based upon the enlargement and immobility of the chest, dullness and absence of vocal thrill, weakness of respiratory sound and cardiac displacement; the last sign is the most important. The hypodermic or aspirating needle should be used in all doubtful cases of effusion. Excepting in some few instances which will be discussed later, the fluid can be obtained and its character noted.

The physical signs of thickened pleural walls are generally the same as those of pleurisy with effusion, except to a less marked degree.

By adhesions the fluid may be encapsulated in one or more localities of the pleura. A local diminution of vocal resonance with evidence of a septic fever should lead to the use of the exploring needle. If the effusion is interlobular or encapsulated on the diaphragm diagnosis is difficult, even with the aid of the aspirator. The use of X-ray may be of use in diagnosing these cases. Bouchard has found that the area corresponding to the effusion in cases examined, "was occupied by a dark tint in sharp contrast with the light color of the healthy side."

Pressure on the end of the tenth rib increases pain in the diaphragmatic variety. Pain is always a prominent symptom. If there be an interlobular collection of fluid, and if it be pus, it is difficult to diagnose from an abscess, especially if it opens into a bronchus.

Diagnosis as to the kind of effusion is very important, as we have just seen from a study of the causes. The aspirator usually decides with certainty the kind of fluid if the signs fail us. Hectic fever, sweats and edema of the chest indicate pus, while pus may exist without definite symptoms. The voice sounds are usually not transmitted, or to a less degree, through a purulent than a serous fibrinous fluid. Dr. J. S. Winters says: "The reason why whispered resonance is almost always absent in cases of empyema is because there is extensive thickening of the pleura."

In differentiating from solidified lung tissue, measuration of chest and heart displacement are of much importance. With effusion measurement of the affected side is most always increased; not so in pneumonia, nor does it displace the heart. In differentiating from lower lobe pneumonia the curved line of Ellis, high in the axilla, lower before and behind, is the reverse of the interlobular fissure.

The obstruction of a primitive bronchus by aneurism or mediastinal tumor will exclude the air and the voice sounds from the lungs, and give the same signs as in pleurisy with effusion. The differential points are the same as given in pneumonia, measuration and heart displacement.

The position of the cardiac impulse

the most important sign in differen-
tion of the left side of effusion from
ricarditis with effusion; it is not dis-
aced to the right in the latter. The
art is feeble and impulse weak and
ffuse.

An abscess below the diaphragm, or
datid cyst, may force the diaphragm
and be mistaken for pleurisy with
usion. Alexander McPhedran says
n introducing a canula the pus is
rced out during inspiration in sub-
renic abscess, in plural effusion dur-
g expiration."

In children and young adults acute
mary sero-fibrinous effusions rarely
ve fatal, except from excessive ef-
ion, absorption taking place usually
thin a few weeks. Absorption is
re likely after aspiration. Tubercu-
s cases are less favorable. The com-
cation of pericarditis makes it grave.
oting from McPhedran again he
s, "The pleura not being a vital or-
n, disease of it can prove fatal only
) from septic absorption, (2) from
ension of disease to other structures
(3) from the volume of the exudate
erfering with the functions of neigh-
ring organs."

Streptococcus pleurisy is the most
ve, as even with free drainage in-
tion may occur. Pneumococcus cases
usually favorable under operative
atment. In tuberculous cases the
d is often sterile; if the infection is
fined to the pleura they do well.
Treatment should be rest in bed even
mild cases until the acute symptoms
te.

For the pain, counter-irritants, im-
bilization by adhesive strays, applica-
n of heat, or, as recommended by
ne, the ice bag, and in severe cases
phes. A hypodermic of morphine of-
en has to be used when the pain is
great. When there is moderate sero-fibrinous fluid and the patient is strong, free saline purgations with a dry diet may be used in order to deplete the blood and thus lead to absorption. In a later stage iodide of potash is usually given, but perhaps with little result. Page recommends salicylate of soda very strongly in that class of pleurisies which begin from exposure to cold or wet, which he classes as of rheumatic origin, and treats them considering the pleural cavity as a very large joint. In support of this treatment Le Fevre refers to observations which have been made in which salicylic acid was found in the pleura almost immediately after it had been administered, therefore he thinks it probable that it had a local curative effect. After the acute symptoms have disappeared, which is usually within two or three weeks, and the fluid is not subsiding, operative measures are to be considered for the removal. In cases of purulent effusion, removal at once by incision between the ribs, or excision of a section of rib should be resorted to. Likewise there should be no delay in aspirating a very large serous effusion where intrathoracic pressure is evident, or there is dyspnea, for fear of heart failure. It is interesting to note the difference among leading teachers as to the time to aspirate. Dr. Page says, "Unless the symptoms be urgent, never operate during the acute stage. There is a great tendency to the formation of adhesions in pleurisy under the best conditions. To draw off this fluid during the active stage of inflammation, as evidenced in part by pain and temperature, would simply bring the inflamed surfaces together that had hithertofore been kept apart by the effusion. Increased irritation with a more severe

grade of inflammation would follow, and extending into the subserous connective tissue, would convert a superficial into an interstitial exudation, and result in a thickened pleura, if not extensive plastic adhesions." We find Quimby supporting Page. On the other hand no less a man than Delafield says he has "given less and less drugs until he has reached the conclusion that aspiration is the treatment for pleurisy, and is not to be employed to draw off the fluid but to cure the disease in the shortest possible time, it matters not whether the case is acute or subacute, or whether or not the patient is uncomfortable." He adds that "ordinarily only one aspiration is necessary, and the patient is able to be about within a week. Under the old treatment it usually takes three or four weeks, sometimes months". Drs. J. S. Winters, Beverly Robinson and W. H. Katzenbach claim a similar experience.

The withdrawal of a small quantity often starts absorption, and the whole then rapidly disappears. McPhedran says: "This is probably due to the removal of excessive pressure from the pleural vessels, allowing of their dilatation and of a free flow of lymph."

The point of aspiration is in the mid-axillary line on a line with or a little below the nipple, as here the chest wall is thin and the spaces wide; this is about the sixth or seventh interspace. Only sufficient suction to maintain the flow is to be used.

Much cough, pain in the chest or the appearance of blood are indications to stop the withdrawal. Empyema is to be treated by free incision and drainage, care being taken to let the fluid escape slowly for fear of syncope. If there is doubt about drainage resect a rib. This is probably always best. The point of operation in both is at the most dependent point, to be determined by aspiration. It is rarely, even in infected cases, desirable to wash out the cavity with any fluid. Good drainage is usually sufficient, and if the fever does not soon drop it means usually that drainage is poor. In the treatment of all varieties of pleurisy it must be remembered that good food, fresh air and a general supportive treatment are most imperative and should not be overlooked.

Earache, children, from colds: Capsician a granule in glass water, teaspoonful every fifteen minutes—2 to 5 doses cure.—*E. A. Leavitt.*

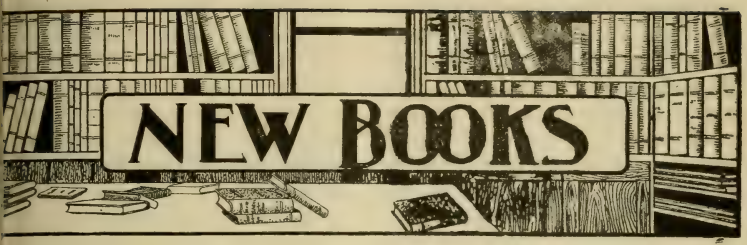
Add 1-5 per cent of table salt to your solutions of corrosive sublimate and they will not pain the mucous membranes.

Irrigate wounds with solutions a little warmer than the body, as cold interferes with the repair of injured tissues.

The wonderful physical vitality of the Turks is attributed by *Health* to their abstinence from alcoholic drinks.

Applications of pure oxygen for skin diseases stimulated a luxuriant growth of hair on the skin exposed to the gas.

Open blisters subcutaneously with a needle sterilized by passing through the flame of a lamp.—*Jour. A. M. A.*



:YNOLDS & NEWELL'S PRACTICAL MIDWIFERY. A Manual of Obstetrics for Students and Physicians, by Edward Reynolds, M. D., Assistant in Obstetrics, etc., and Franklin S. Newell, M. D., Assistant in Obstetrics and Gynecology in Harvard University Medical School, Boston. In one octavo volume of 531 pages, with 253 engravings, and 3 full page colored plates. Cloth, $3.75 net. Lea Brothers & Co., Publishers, Philadelphia and New York, 1902.

In the present over-written condition medical literature, it is necessary at the book-buyer exercise special discretion. There are books which on account of great mass of material and the numerous divergent opinions presented are confusing to the student and practitioner; there are others which in their abbreviated form omit important practical points; there are others, and this volume is one of them, which follow the clearly defined line of treatment, avoiding lengthy discussions, so that when consulted by the busy practitioner he finds a dogmatic and practical line of procedure or medicae in preparing for examination finds that which fixes itself upon his memory and can be readily recalled. The part devoted to management of labor is clear and positive as to indications; the portion allotted to obstetrical surgery and its indications is very complete. We bespeak for this enlarged and practically re-written edition a favorable and meritorius reception by the profession. The illustrations are graphic and well selected. Binding, paper, and type are of the usual high class of these publications.

APPLETON'S NEW MEDICAL SERIES. Diseases of the Anus, Rectum, and Pelvic Colon, by James P. Tuttle, A. M., M. D., Professor of Rectal Surgery, New York Polyclinic College and Hospital, Visiting Surgeon to the Almshouse and Workhouse Hospital, Fellow of New York Academy of Medicine, Fellow of Chicago Academy of Medicine, Etc. Eight Colored Plates. Three Hundred and Thirty-eight Illustrations in the Text. Cloth, $6.00. Half-Leather, $6.50. Sold Only by Subscription. D. Appleton and Company, Publishers, New York.

This work is a complete and practical review of the subject of diseases of the rectum and the adjoining intestinal tract. The author, whose ten years conduct of a clinic devoted entirely to this class of cases, has afforded an admirable field of observation and

experience, makes a special effort to present his subject in a manner that will appeal to the general practitioner. To this end he has been at unusual pains to avoid generalities, detailing the methods of examination, diagnosis and treatment in order that this class of his readers may have no difficulty in following the various steps of the examination and treatment. He has also carefully considered the question of local treatment and clearly outlines the conditions in which this form of treatment is likely to be effective.

In view of the fact that diseases of the rectum have been a rich field of operation for quacks and charlatans chiefly because it has in the past been much neglected by the general practitioner and also because these pretenders have appealed to the general dread of operative procedures by advertising to cure without the aid of surgery, it is well that the profession should be informed and practiced in at least the local management of these diseases.

The opening chapter treats of the embryology, anatomy and physiology and the succeeding chapters completely cover the ground of disease of the rectum and lower colon, ending with one on feeding by rectum and colon, with special formulas. The reader can thus gain a thorough survey of this branch of medicine. The book is handsomely gotton up and admirably illustrated.

A Magazine Thirty Years Old.—The Christmas (December) Number of the *Delineator* is also the Thirtieth Anniversary Number.

To do justice to this number, which for beauty and utility touches the highest mark, it would be necessary to print the entire list of contents. It is sufficient to state that in it the best modern writers and artists are generously represented. The book contains over 23[illegible] pages, with 34 full-page illustrations, o[illegible] which 20 are in two or more colors. The magnitude of this December number, for which 728 tons of paper and six tons of ink have been used, may be understood from the fact that 9 presses, running 14 hours a day, have been required to print it; the binding alone of the edition of 915,000 copies representing over 20,000,000 sections which had to be gathered individually by human hands.

A Pocket Text-Book of Materia Medica, Therapeutics, Prescription Writing, Medical Latin and Medical Pharmacy. By William Schleif, Ph. G., M. D., Instructor in Pharmacy in the University of Pennsylvania. New (2d) edition. Revised and enlarged. In one 12 mo volume of 382 pages. Lea's Series of Pocket Text-Books. Edited by Bern B. Gallaudet, M. D. Cloth $1.75, net; Limp Leather, $2.25, net.

This volume is a comprehensive and condensed reference and text-book on Materia Medica, with specially well written chapters on Prescription-writing, Medical Latin, Medical Pharmacy, Practical Anaesthesia, Tables of Doses, of Poisons and Antidotes and Incompatibles. Index of Diseases and Remedies and General Index are complete. Among remedies we note omission of Condurango. This book expresses in a concise and easily rememebred form the knowledge required in the modern college course. In the consideration of the different medicinal agents, paragraphs are given to physical properties, physiological action, toxicology and therapeutics, chapter on Prescription-writing and Medical Latin have been

e-written and this second edition which as been called for in so brief a period, resents in a succinct form all that ould be desired in a pocket text-book eries.

Text-Book of Practical Diagnosis.—The Use of Symptoms in the Diagnosis of Disease. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, 727 pages, 236 engravings and 25 full-page colored plates. Cloth, $5.00 net; Leather, $6.00 net; Half Morocco, $6.50 net. The latest edition—fifth in six years of this unique and popular text-book the use of symptoms in the diagnosis disease is an enlarged one and conns the most recent points in symptnalology as well as the welcome adion the more important practical nical tests. Hare's Practical Diagsis and Hare's Practical Therapeus are found in the library of more ysicians than any works which have ne from the medical press in the st decade. The above new edition is roughly abreast the medical thought today and will no doubt be accorded widespread sale of its predecessors. f. Hare's works are so well known the profession that lengthy notices superfluous.

The "Greener."—In an article on he Russian and Polish Jew in New rk," in the November magazine mber of the *Outlook*—one of a series articles in which the life of immignts in America is traced by nationties and localities—Mr. E. A. Steiner s describes the "greener."

The "greener" is treated with kindss, but is made to feel his greeness at every point. There is an unwritten law in the Ghetto that for two days he must not work, but must eat all he can, for usually he arrives hungry to the starving point. His countrymen come to see him during that time, ask all sorts of questions about the old home, give much advice, and show a great deal of superior wisdom in the use of English, upon which they pride themselves, and with which they freely sprinkle their Yiddish. The more English they can display the smarter they are, and usually in two years the "greener" has mastered this difficult language. He is put to work after the two days are over, and this process is called "ausgreenen"—getting a chance to shed old-country clothes and habits, and becoming like us; generally he goes into a sweat-shop as an aprater," which means that he learns to run a sewing machine, and for two weeks he receives no wages, but a good deal of a certain kind of training. In the rarest instances is he a tailor, being almost always unusued to manual labor, and those two weeks are the hardest of his existence; after that time he earns from one dollar to a dollar and a quarter a day, and reaches the goal of two dollars after a long apprenticeship. Out of his wages he sends money to wife and children, or aged parents whose support he is, and to whom America is still a large gold-field where money is picked up. The wife and children are anxiously waiting to join them, and he is saving money for their tickets.

Pitiful was the story of a cloak-presser who has a wife and four children on the other side and who has been almost heart-broken because he has been here two years and has been kept by "hard luck" from sending for them I worked by his side for a day, receiv-

ing my first lessons in cloak-pressing from him, and the last letter from his wife was so pathetic that it drew tears from my eyes and money from my pocketbook towards those tickets. When the day's work was over, and the possibility of soon seeing his family was almost realized, he said, as we parted, "I shall sleep happily tonight;" and so did I, in spite of mighty sore muscles.

LITERARY NOTICES.—The importance of a frank, but pure and helpful book to boys, was realized by the author of the Purity Books in the Self and Sex Series, when he was but fifteen years old—at that age when, like all boys, he was perplexed with the mysteries concerning the origin of life and being. One day, after having declined a vile book that had been offered him, he says God put this thought into his mind: "If there are good men in the world who love us boys and who would do us good, why is it that none of them have ever written a book to tell us just what we ought to know?" This was the seed thought which subsequently germinated and after more than thirty years culminated in his life work, which has now been so successfully completed in the Purity Books in the Self and Sex Series, addressed to boys and young men at different periods of life, by Sylvanus Stall, D. D.

Dyspepsia.

The following, according to the New York *Medical Journal.*, is Dujardin-Beaumetz's treatment of dyspepsia:

1. When the gastric disturbance is due to oversecretion of gastric juice the diet should consist of eggs, farinaceous preparations, vegetables and fruit. The eggs should be soft-boiled, especially the yelks; the farinaceous food should be taken in the form of soups—as potato, turnip, lentil, wheat, oatmeal, barley and macaroni—all of these, of course, be rendered as thin as possible. The vegetables should be thoroughly cooked and taken in the form of vegetable soup or soup made of small peas well boiled; the same holds good for spinach and turnip. All fruits avoiding raisins, should be used in the form of jelly. The bread should be well baked or toasted. As a drink, wine mixed with water, light beer or milk mixed with alkaline waters may be used.

2. When the dyspepsia is due to deficient secretion of gastric juice the diet should be made up of peptonized substances, toasted bread, bouillon, mixtures of broths and milk, powdered meats, scraped meats, pepsin and lemonades with hydrochloric acid made as follows:

R Acidi hydrochlor. dil.....3ii 8|
Aquæ, q. s. ad.....Oi 500|

M. Sig.: One glassful after each meal.

3. In dyspepsia due to sympathetic troubles, the diet should be purely vegetable.

The older methods of treatment for epistaxis (*Clinical Review*) while ordinarily reasonably positive and satisfactory, must give way to the newer method of the employment of the extract of the suprarenal gland. Not only is the application of this solution followed by almost instantaneous blanching of the mucous membrane and stoppage of the hemorrhage, but it has a very wide range of effect. Except in aged persons with a cardiopathic condition causing the epistaxis the method is universally applicable and valuable

MEDICAL NEWS AND ITEMS.

Yellow fever is raging in the Ama-
n Valley, Brazil.

Russian law forbids marriage after
e eightieth year; and limits people to
e marriages. Well, isn't that enough?
France is waking up. French chil-
en must be vaccinated during the first
ar, the eleventh and the twenty-first.

Four cases of bubonic plague have
curred in San Francisco during the
nth of August, all in Chinamen and
fatal.

One of the leading wholesale drug
uses of New York City is charged
h substitution of "something else"
Antikamnia.

W. H. Welch, professor of pathol-
y in the Johns Hopkins University,
ently sailed for England to deliver
Huxley lectures at the Charing
oss Hospital.

There were 254 fresh cases of cholera
Egypt October 2d, and 241 deaths
m that disease. The totals since the
break, July 15th, are 36,658 cases
l 30,988 deaths.

n blood poisoning with high fever,
at pain and radiating red streaks
ng the course of the lymphatics, with
vulsions, veratrum viride is the
et anchor.—*J. Q. Moxley.*

Miss Kate Shelley, who, when a
ld, crept across a bridge during a
rm to save a passenger train from
truction, has been engaged as a
nurse by the State Insane Asylum in Cherokee, Iowa.

It is said that Surgeon-General Waller Wyman, head of the United States Marine Hospital Service, will soon disclose to the world discoveries of great importance regarding the cause and treatment of yellow fever.

May not the epidemic of typhoid in Chicago be attributable in part to some other cause than impure water? What about the obviously unfit and decayed fruit and vegetables, which are hawked about the streets by cheap peddlers?—*Alkaloid Clinic.*

Dr. Johnannes Orth, professor of pathological anatomy at the University of Gottingen, succeeds the late Professor Virchow in the chair of pathological anatomy at the University of Berlin. Professor Orth was for many years Virchow's assistant.

The committee having in charge the fund raised to commemorate the eightieth birthday of Prof. Rudolf Virchow, announces, says an exchange, that after the payment of all expenses the sum of 53,652 marks remains for the Rudolf Virchow Foundation.

In a recent U. S. P. H. and M. H. report, Dr. J. O. Cobb, who investigated the disease called spotted fever, prevailing in the Bitter Root Valley, Mont., found that the disease was caused by the bite of a tick. These ticks

are parasites upon the ground squirrel, and the spread of the disease has been traced to the section of the country infested with ground squirrels.—*Med. Age.*

For fourteen years a Peoria physician has practised medicine in that city, and for a quarter of a century elsewhere. Recently, however, in a court room, it developed that he had not registered his license with the county clerk as required by law, and on that account his entire fourteen years' practice in this city has been illegal. He was nonsuited and his case thrown out of court. It was a small technicality, but "Lor' bless you, mum, the law is full of them."

The Brazilian Academy of Medicine offers a gold medal and diploma for the best works received during the year on the following subjects: Influence of malaria as a determining factor in arotic heart affections; fevers at Rio de Janeiro; clinical study of intestinal sutures; treatment of unbilical hernia; carcinoma of uterus; puerperal eclampsia; role of vegetable oxidases in therapeutics, and study of the mineral waters of Brazil; besides a few topics of merely local interest.—*Med. Age.*

A Well Advertised School.—The University College of Medicine of Richmond, Va., is one of the educational institutions which, while maintaining the highest standard of equipment and scholastic requirements, at the same time shows a rapid growth in the number of its students. The Proctor officially states that he believes this is due to the extensive use of newspaper advertising in making known the excellence of the courses of instruction and methods of teaching.

Ophthalmia is so prevalent among a large number of pupils in the public schools of Chicago and New York, that the board of health in both cities has placed it on the list of contagious diseases and physicians will be compelled to report cases found in their private practice. Investigation made in two of the public schools where the eyes of two thousand children were examined, revealed the fact that at least 18 per cent. had the disease. In one of the schools 20 per cent. of the children were afflicted and in the other fifteen per cent.

Dr. Willis B. Parks, of Georgia, has addressed a circular letter to each of the members of the Legislature of that State, asking a confidential statement of their views upon the question of establishing a State sanitarium for inebriates. Every State which is able to afford it should surely have such a sanitarium. In North Carolina there is no public provision for this class of people, the hospitals for the insane having been cleared of them; and yet no one has yet said why an inebriate is not as well worth saving as an insane person.—*Charlotte Observer.*

The present biological school at Wood's Hall is, according to the Philadelphia *Medical Journal,* to be much enlarged and so developed that in construction, equipment, and endowment it will be the finest biological laboratory in the world. A large sum has been set aside for this out of the $10,000,000 recently given to found the Carnegie Institute in Washington, D. C. Heretofore this school has been maintained largely by the University of Chicago. The new buildings to be erected will contain the most delicate instruments and every appliance that can aid the scientists in their work. It is hoped that some remarkable biological discoveries will result.—*Med. Age.*

The new officers of the Oregon State Medical Society elected September 11, 1902, are as follows: President, Dr. Henry Waldo Coe, Portland; First Vice President, Dr. P. W. Van Dyke, Grant's Pass; Second Vice-President, Dr. J. A. Ceisendorfer, The Dalles; Third Vice-President, Dr. J. P. Tamiesie, Hillsboro; Secretary, Dr. A. D. Mackenzie, Portland; Treasurer, Dr. Mac. Cardwell, Portland. Councilors: Dr. W. J. May, Baker City; Dr. J. Fulton, Astoria; Dr. Wm. Amos, Portland; Dr. C. F. Wilson, Portland; Dr. S. White, Corvais; Dr. S. T. Linkter, Hillsboro; Dr. W. T. Williamson, Salem; Dr. Wm. House, Pendlenk; Dr. Ellis, Portland; Dr. R. C. Coffey, Portland.

An ingenious Russian official, in command of a Corsack station near the Caspian Sea, has invented a method of sex control which threatens to rival that of the late Prof. Schenck. Being anxious that his district should make a good showing in the matter of boy babies, this consistent underling of the most paternal of governments has decreed that henceforth none but male children shall be generated in the country under his command. In order to make this law effective, he has ordered that the father of every girl baby born in the district shall be punished with fifty lashes with the knout. The veracious correspondent who sent this story to a London paper adds that already several men have received their fifty strokes for failure to comply with the law.—*Medical Record.*

An unusual point of law, the first of its kind ever raised in Canada, and it is stated the second on record, has recently, says an exchange, been pronounced on and decided at Toronto by Mr. Justice Lount. A farmer in the western part of Ontario died, leaving a widow and four children. A fifth child was born four months afterward. The case turned on the division of a $2,000 insurance policy, which according to the will was to be turned over to the widow and children in equal shares. The administrators applied to the court for advice as to whether or not the infant child born after the death of her father was entitled to a share in the insurance money. His lordship ruled that a child, although unborn, is still a child in law, and takes rank as a child living at the death of its parent.—*Med. Age.*

Indiana's Laws Against Grave Robbing.—The recent tours of a band of graveyard desecrators in Indiana has brought into prominence the law governing such crime. Briefly, the statutes contain the following: For disturbing a grave, three to ten years in State prison; for removing a corpse, three to ten years in State prison; for concealing a stolen corpse, one to three years in State prison; for buying a stolen corpse, one to three years in State prison; for failure to produce record of bodies received by medical college, one month to one year in county jail; for receiving a corpse without record, one to five years in State prison; for making false entry in record of corpse, one to three years in State prison; for dissecting corpses of which there is no written record, two to five years in State prison.

Fearful Ravages of Cholera.—The fearful ravages of plague and cholera in the Old World are set forth in mail advices received by the Marine Hospital Service. From Manila Chief Quarantine Officer Perry makes a conservative estimate that the cases of cholera that have actually occurred in the Philippine Islands since March 20th last

aggregate 75,000, with a mortality of 75 per cent. The province of Iloilo and the adjacent island of Negros are badly infected and the situation is alarming. Some of the towns in these provinces have lost 10 per cent. of their population and the epidemic continues severe. In Japan, the latest advices show that there have been 4,329 cases and 1,650 deaths from cholera. In China there have been 40,000 deaths at Nankin. In Egypt there were 23,684 deaths between July 1st and August 15th.—*Charlotte Observer.*

Bodies Stolen for Dissecting Purposes.—Seven self-confessed colored body resurrectionists are within the meshes of the law in Indianapoils. They have implicated a physician connected with one of the medical colleges, who bears a good reputation. They have also insinuated that there are others who are guilty of wrong doing in this same line of procedure. The men who have turned state's evidence will in all probability be punished, but it is the general belief that the physicians whose names have unfortunately been used in connection with the affair will be able to substantiate the denial which has been made by them. The beginning of the investigation by the officers of the law originated from information obtained through a man who stated that he had been informed by some one, whose identity was unknown to him, that a member of his family who died recently could be found in the dissecting room of the Central College of Physicians and Surgeons. This proved to be true, and, like a flight of stair steps, the alleged facts linked together until it reached the acme of sensationalism. We do not desire to condone the wrong doing of others nor to uphold criminal acts in any sense whatever, but it is true, physicians and surgeons must possess an education upon a higher plane than was exacted 20 years ago. It is folly to think of any one reaching perfection in medicine and surgery without ample opportunity to study the cadaver. However, this must not be understood as a plea for the violation of the law, but it does emphasize the fact that the Legislature should enact a law which will give the medical colleges an opportunity to procure subjects for dissection. —*Med & Surg Monitor.*

The German courts have rendered a decision of great importance to the medical profession in the case of a Nuremberb physician who was arrested on a criminal charge for neglecting to notify the authorities of the death and mutilation of a new-born infant. The physician was called to attend a woman who was seriously ill. In his examination he discovered that she had recently given birth to a child and he found the mutilated remains of the infant in a vessel under the woman's bed. Apparently the child had been dead but a short time. He deemed it his duty to remain silent regarding the criminal aspects of the case and went on with the treatment of the woman just as though he had not discovered the child's body. In some way the facts became noised about and when the police made an investigation they learned the physician's connection with the case and his knowledge of the death of the infant and he was placed under arrest charged with what in this country would be equivalent to being an accessory. On trial he set up as his defence that he had acquired the knowledge of the alleged crime in his professional capacity; that had he not been in confidential relation with the mother as her

ysician, he would not have known of e existence of the child's body; that one but a physician could have known e woman's condition and then only uld he receive the facts as a matter professional confidence. The courts ld that his position was correct and ithin the law; that to have made own his discovery would have been violate the confidential relations exting between physician and patient, d he was discharged from custody ter an honorable acquittal.—*Buffalo ed. Jour.*

"Doctor of Osteopathy."—Whatever e may think of the osteopath from a ofessional viewpoint, there is at least e matter with which they are in acrd with the medical profession, Mark wain and the greater part of the urch world, and that is their comon sense view of the fad of Mother ddyism in general and Christian sice in particular. There is a little mphlet published in the interests of e osteopaths entitled, "Osteopathi. uccess," which in a recent issue lands the seeress of the far east as a ud and her belief as a fake. An interesting feature—interesting to the edical mind—of the same issue is that rtion devoted to clinic cases from e field, wherein are reported some of e cures of osteopathy by several acve practitioners who have been decated with the title and degree of D. Four cases will suffice. The first s a goitre on a man of 40. His mothe also had been suffering with a very ge one. Assuring him that there was lp for him in osteopathic treatment, took the case, treating him twice a ek, and at the expiration of two nths the goitre was cured. The ion consisted of an interior condition the fifth cervical vertebra, and a falling of the clavicle." Here endeth the first lesson in etiology and pathology. The second case was that of a man who was suddenly "taken with a very weak and irregular beating of the heart. Osteopathic diagnosis revealed an enlarged condition of the liver and lesions in the pneumogastric nerve." Eight treatments cured the gentleman. Then along came the third wonder: a case of diabetes mellitus in which the characteristic symptoms are reported and where osteopathy shines like a shooting star, for a new appetite is discovered. This patient had an "erotic appetite." Osteopathy is entitled to and deserves all the credit for the discovery of this new symptom in diabetes. Anyway, in spite of his erotic appetite, this patient received nine treatments and went back to work. Twelve other treatments cured him. In this case the lesions "were found in the nerve centers of the liver and kidneys." The fourth case does not give the location of the lesion; but the "patient was most efficiently helped over that critical period in which collapse seemed imminent and started on a new epoch of life with fifteen osteopathic treatments." From these cases osteopathy appears to be a case of "D. O., D. O., my huckleberry, D. O."—*Buffalo Med. Jour.*

The Signs of the Times.—The action of the faculty of a well known medical college in Cincinnati, declaring it closed, is one of the interesting signs of the times. The college authorities state that this action was necessary on account of the recent State enactment making the entrance examinations to medical colleges in Ohio very rigid. With this in force there came a marked falling off in attendance. Medical education has made such rapid progress in the past few years that the smaller med-

ical colleges find it difficult to equip themselves with the necessary outfits to teach efficiently their students. In consequence of this students select the college which offers greatest facilities both for laboratory and clinical work. The stand taken by the majority of the States, in requiring students to pass an examination after graduation before being allowed to enter upon practice, has also had its effect of deterring students who have not the necessary literary qualifications from entering upon the study of medicine. The time is now past when a few medical men can obtain a charter from the State, elect themselves into professorships of their own choosing, and start a medical college with any hope of its being successful. It is not to be inferred that such medical schools failed to turn out many good men, for to-day some of our most prominent physicians and surgeons are graduates of schools of this class. They, however, would have succeeded despite the inferiority of the college from whence they graduated. The next few years will undoubtedly see the profession of this country upon a much higher plane both from the standpoints of literary culture and scientific equipment. The action of the majority of the States requiring graduates to take examinations before a State board before license is given to practice will make a number of the smaller colleges in the country close their doors, but while limiting the quantity of graduates thrust upon the public, the quality will be greatly raised. The education of the present-day physician has come to be a very expensive affair. Four or five years in college and another year in a general hospital means the outlay of considerable money. However, as people are constantly demanding what is best in other professions, so it will be in medicine. Year by year competition will become keener, and the public will learn that to look wise and say nothing does not constitute the sum total of all that is known of the medical art. The recent graduate, if he is to find the small amount of space which is said to always exist at the top, must not be handicapped in his attainments of this by poor and insufficient training.—*Editorial Med. Age.*

Doin' Her Best.

Pretty good world
With her roses and rest;
Don't you believe
She is doin' her best?

Don't you believe
She is rolling the way
That leads to the light
Of the perfectest day?

This for life's comfort
In all the unrest;
This here old world
Is just doin' her best!

—*Atlanta Constitution.*

When lime has gotten into the eye, something must be done at once. Wash the eye thoroughly with a large quantity of warm water—for a little water but adds to the trouble by slacking the lime—and then introduce a solution of sugar and water. This is superior to solutions of vinegar or dilute acids, because sugar forms an insoluble compound with lime.

The odor of alcohol or of tobacco may be removed by peroxide one part to five of rose water, or by diluted listerine.

The Presentation

of the following

VALUABLE FORMULAS

is of interest to every Physician.

PIL. DIGESTIVA

(WARNER)

℞ Pepsin Conc't, 1 gr.
Pv Nuc. Vom. ¼ gr.
Gingerine, 1-16 gr.
Sulphur, ⅛ gr.

VERY EFFECTUAL IN INDIGESTION.

SPECIFY WARNER & CO.

PIL. ARTHROSIA

(WARNER)

℞ Ac. Salicylic.
Ext. Colchicum.
Ext. Phytolacca.
Podophyllin.
Quinine.
Pv. Capsicum.

ANTILITHIC, TONIC, ALTERATIVE. VALUABLE IN THE TREATMENT OF

RHEUMATISM AND GOUT.

PIL. PERISTALTIC

(WARNER)

℞ Aloin, ¼ gr.
Ext. Bellad. ⅛ gr.
Strychnin. 1-60 gr.
Ipecac, 1-16 gr.

MILD, THOUGH EXCEEDINGLY EFFECTIVE IN

CONSTIPATION AND BILIARY DISORDERS.

INGLUVIN

FROM THE LINING MEMBRANE OF THE GIZZARD OF CHICKEN

A Specific in Stomach Troubles and excellent as an adjunct to Calomel administration; it prevents nausea.

SAMPLES AND LITERATURE ON REQUEST.

WM. R. WARNER & CO.

PHARMACEUTICAL SPECIALISTS

PHILADELPHIA NEW YORK CHICAGO NEW ORLEANS

THERAPEUTIC HINTS.

Treatment of Cystitis.

G. Bjorkman, in *Merck's Archives,* recommends, in the treatment of acute and subacute cystitis, absolute rest in bed; all active, local interference in the acute stage is contraindicated. The first care should be to relieve the distress and support the bladder in its attempts at free and complete evacuation. This, according to the author, is best done by opiates in the form of suppositories and cloral and the bromides per os. The diet should consist of milk, soup and gruels. The bowels should be evacuated by means of saline cathartics. For vesical spasm and tenesmus, the following may be given in the form of suppositories:

℞	Ext. opii.....gr. i	06
	Ext. hyoscyami.... .....gr. i	06
	Ext. cannabis ind.....gr. iss	09
	Lupulini ....gr. xv	1
	Butyr. cacao, q. s.....	

M. Ft. suppos. No. 1. Sig: Insert one in the rectum as needed two or three times a day.

Internally, the following will be of service:

℞	Chloralis hydratis.....	
	Pot. bromidi, aa.....ʒiss	6
	Syr. aurantii.....ʒi	30
	Aq. destil, q. s. ad.... ...ʒiii	90

M. One tablespoonful every three or four hours.

As an urinary antiseptic the following:

℞	Formin or urotropin....gr viii	50

M. Ft. chart, No. 1. Sig: Take one powder in a glass of water before each meal.

If the urine should be hyperacid a little potassium citrate or acetate should be added to the water; if too alkaline a few drops of mineral acid may be added. In cases of subacute cystitis irrigation may be carried out, using the following solutions:

℞	Argenti nitratis...gr. iss-iiss	09-15
	Aq. destil, q. s. ad.... ..ʒiii 90	

M. Sig: One-half the amount to be used lukewarm, as an irrigation; or:

℞	Argentamini.....gr. xv	1
	Aq. destil.....Oii	1000

M. Sig: One or two ounces to be used in the form of an irrigation once or twice a day after the acute symptoms have ceased.

Inhalation in Tuberculosis.

The following, according to H. E. Lewis in New York *Medical Journal,* is valuable as an inhalation in cases of mixed infection with marked purulent expectoration, for allaying laryngeal irritation and cough:

℞	Tinct. iodi co.... .....ʒiv	16
	Tinct. tolutani .....ʒss	15
	Tinct. cinnamomii..... .ʒi	4
	Acidi carbol. .....ʒi	4
	Spts. chloroformi.....ʒi	4
	Alcoholis, q. s. ad.....ʒiv	120

M. Sig.: To be used in a bottle with large cork, through which two glass tubes are run. Inhale through the shorter tube which does not touch the liquid.

Worth Investigating

The successful treatment of consumption, scrofula, and wasting diseases generally, is a subject in which every physician is deeply interested. Hydroleine (hydrated oil) simplifies the question to a remarkable degree.

As a food for fat-starved tissues, nothing is equal to cod-liver oil, and Hydroleine is a preparation of the oil which insures its complete assimilation, because it is pre-digested by the use of pancreatine. It is stable, unirritating and free from rancidity, containing only the purest oil preserved by a minute quantity of salicylic acid; and through the agency of soda the pancreatine is protected from neutralization by the acids of the stomach.

In short, Hydroleine is prepared in strict conformity with the true principles of the digestion of fats and is unequaled

As a Producer of Weight and Strength

Sold by druggists generally.

THE CHARLES N. CRITTENTON CO., 115-117 Fulton Street, New York.
Sole Agents for the United States.

Samples free to physicians.

Newer Materia Medica.

The Efficacy of Antiseptics in the Treatment of Certain Conditions With Special Reference to the Merit of Glyco-Thymoline.

By C. H. Powell, A. M., M. D., Professor Principles of Medicine and Clinical Medicine, Barnes Medical College, St. Louis, Mo.

Ever since the introduction of Lord Lister's principles to the medical profession physicians have studiously and patiently investigated the many antiseptic agents introduced to their notice from time to time by different pharmaceutical establishments of recognized repute. Some of these preparations have not stood the test, and as a result "have fallen by the wayside." Others in proportion to their merits are filling an appropriate place in the prescription book. Of these there are but a very few indeed, and at the head of them all my experience induces me to place Glyco-Thymoline. This remedy, aside from possessing properties of a most positive nature is handled by the Kress & Owen Company in a most thorough ethical manner. The Medical Press is selected by the Kress & Owen Company to the exclusion of all other mediums in order to keep the Glyco-Thymoline conspicuously before the profession. Not only that, but as a further evidence of the sincerity of the firm in believing their product all that is claimed, a liberal sample is sent any physician who may desire to test Glyco-Thymoline. Without going further into the merits of Glyco-Thymoline as an antiseptic possessing decided therapeutic properties, I desire to report a few cases wherein by careful and persistent use this alkaline, alterative solution has given me most excellent results.

Case 1. Mrs. M. W., widowed, aged 42, consulted me for nasal difficulty of several months' standing. An examination of the nasal fossae revealed several very interesting conditions. There were grouped together possibly seven or eight foci of ulceration, some of these spots ran together, presenting more or less of a serpinginous ulceration. Each ulcer was covered with a dirty gray ash colored exudate which adhered firmly to the underlying schneiderian membrane. I first applied an absorbant cotton, a 50 per cent. solution of peroxide of hydrogen, and having removed the purulent secretion sprayed the nose thoroughly with a 75 per cent. solution of Glyco-Thymoline in distilled water. I instructed the patient to report the day following for a renewal of the treatment, and to my surprise found a healthy looking surface in place of a suppurating wound. I repeated the spraying of the nasal fossae some three or four times more, and complete healing took place, the nose returning to its normal condition within

week's time from the first applica-
on.

Case 2. Mrs. F. K., married, aged
, was brought to me for a disturb-
ce of the throat, which owing to the
ct of a member of the lady's family
ving recently died of tubercular dis-
se, was a source of much worry and
ental anxiety to both the lady and
r husband. The tonsils were some-
at congested, and showed upon their
rfaces several little points of depos-
dipping down into the tonsilar
pts. I immediately sprayed the ton-
s with a full strength solution of
yco-Thymoline, and at the same time
ve the lady a six-ounce bottle 50 per
t. strength to use as a gargle. In
ee days' time she called to get some
re of the solution which she stated
s very prompt in relieving her of her
ublesome tickling sensation. Upon
pection I found the throat entirely
ansed of all exudates and the hyper-
nic appearance of the tonsils was en-
ly removed, the gland assuming an
ost normal hue. I again sprayed the
sils with a full strength of Glyco-
ymoline, and renewed the bottle
her, or rather requested her to have
bottle refilled at the drug store. She
led again to see me in a few days,
l stated she was entirely relieved of
unpleasant symptoms, and did not
nk further treatment was necessary.
ccordingly dismissed her cured.

Case 3. On the 21st of July, 1902,
ss N. McK. consulted me for consid-
ble nasal irritation associated with
e throat, sneezing, and catarrhal dis-
rge. She had been treated by a
e specialist in Chattanooga, Tenn.,
h very little evidence of improve-
nt. An examination with the laryn-
scope revealed the presence of
onic thickening of the laryngeal membrane, and a large cluster of adenoids filled the posterior nares descending into the larynx. Operation on July 25th under chloroform anaesthesia the nares were completely cleansed of the foreign tissue, 50 per cent. peroxide of hydrogen solution was then used to flush out the cavity followed by a 25 per cent. solution of Glyco-Thymoline (Kress). The bleeding accompanying the operation was quite free, but immediately after the nasal chambers were thoroughly flushed out with the Glyco-Thymoline an arrest of the hemorrhage occurred. The nose was subsequently flushed out daily with Glyco-Thymoline solution, and a perfect cure resulted in about ten days from the first treatment.

Case 4. Last May, 1902, I had a young society lady en route to Montana, who was sent me by Dr. Frank Jelks, of this city, for a critical examination of her lungs. A careful examination revealed the entire absence of any lung disease, but the nares contained a polyp. The lady could not take any treatment but I advised her to have the polyp removed at the earliest possible moment, and as a local agent advised her to spray out her nose twice daily with a Glyco-Thymoline solution which I ordered for her at once. I lost sight of this case until near the middle of July, when I learned that she had never submitted to an operation for the removal of the polyp, but had used carefully and persistently the spray I had prescribed for her, and having no further difficulty with her nose believed the polyp to be a thing of the past. She had not used the solution for over three weeks as she had no occasion to do so.

Case 5. A young man consulted me some three weeks ago for a sore throat,

with lachrymation of both eyes, sneezing, and a great tendency, as he expressed it, of taking cold. An examination of both nostrils revealed great thickening of the mucosa, almost complete occlusion of the left side, and partial occlusion of the right nostril. The tonsils were very much hypertrophied, were hyperaemic in general appearance, and had a grayish deposit dipping down into the crypts. This case evidently of grippal origin demanded a prompt treatment to combat the Grippe Bacillus. For the treatment of this class of cases in particular I have derived the greatest benefit from the Glyco-Thymoline applications applied pure to the throat, and in 25 per cent. solution to the nares. A very useful plan is to flush out the nose once daily from behind forwards with the Glyco-Thymoline solution. This antiseptic can be used in weaker solutions, but I greatly prefer the 25 per cent. solutions for nasal work, this strength having given me by far better results than weaker solutions.

In conclusion I desire to call attention to Glyco-Thymoline as an antiseptic demanding attention in the treatment of washing out the stomach. I wish to say that I have been using this efficient antiseptic to the exclusion of every other like remedy on the market. It not only is efficient as a germicide, but is absolutely free from poisonous or irritating influences, and can be used in lavage with the utmost safety, and freedom from possible bad consequences. I might enumerate a few cases in which I have used Glyco-Thymoline in the performance of lavage, but believe I am already expecting too much of my readers to claim their further attention. If physicians are in doubt as to what antiseptic to use in practice, give Glyco-Thymoline the fir preference. It is prompt in its actio reliable in its field, harmless in i modus operandi. I regard from m personal experience extending over number of years Glyco-Thymoline being the very best remedy of this cla placed at the disposal of the medic fraternity.

Hypertrophied Prostate With Diff cult Micturition.

For an old gentleman, 74 years age, who was suffering from hypertr phied prostate with difficult micturitio I prescribed Sanmetto. The result were favorable, and after taking tw bottles of Sanmetto he was so muc improved as not to require the use c the catheter, which he had been com pelled to use for several months pre vious at least once in twenty-fou hours. I have since prescribed San metto in five similar cases with equall good results.

E. C. CULBERTSON, M. D.
Keith, Ohio.

Membranous Complications--(Throat Bronchii and Lungs.)

Under the above heading we find th following by Walter M. Fleming, A M., M .D., New York City, in the Sep tember number of *The Medical Era*

"With all the experience of more than a quarter of a century, in the treat ment of winter cough, and its compli cations of laryngeal, bronchial and pul monary irritability, also dyspnoea, asth matic spasms, and finally whooping cough—usually the most persistent and tenacious of all of these membranous maladies—I find no one remedy more strongly indicated, or which yields more prompt and satisfactory results than antikamnia and heroin tablets

composed of antikamnia 5 grains and heroin hydrochloride 1-12 grain. The purpose of this combination is manifest at once, for it provides primarily, a respiratory stimulant; secondly, a soothing sedative to the irritable mucous membrane and thirdly, an antipyretic and analgesic. Result: A prompt and efficient expectorant, which at once relaxes the harsh and rasping cough, and releases the tenacious, sticky and gelatinous mucous, while its soothing influence is at once manifested, greatly to the comfort and contentment of the patient."

Sanmetto in Cystitis, Gonorrhea and Irritable Prostate.

I have been an extensive user of Sanmetto for a number of years, and can truthfully say that when the therapy of the pure santal and saw palmetto is indicated, I find Sanmetto a remedy par excellent. I have used it extensively in cystitis, chronic gonorrhœa and irritable prostate, and it has universally relieved, if not cured, my patients. As long as it maintains its present standard of purity I shall use it, for I deem it pure and ethical.

W. R. HILLEGAS, M. D.
Chicago, Ills.

Hysterectomy for Cancer of Uterus.

By T. J. BIGGS, M. D., Sound View Hospital, Stamford, Conn.

Mrs. T., age 47, American. Diagnosis, carcinoma of uterus. Entered hospital October 10, 1901, in a greatly run down condition. She was put on an absolute bovinine diet until October 14th, when at 1 o'clock she was given a high rectal injection of bovinine and salt solution, three oz. of each, and at 2 o'clock, under ether anaesthesia, I performed an abdominal hysterectomy. First before the uterus was detached

Vapo-Cresolene

The Atmistopharmacon

FOR

WHOOPING COUGH

℞ Vaporized Cresolene at night.
Plenty of Fresh Air during the day.
Much Nourishing Food.

FOR TWENTY YEARS this treatment has resulted in quick cures without complications. It insures strengthening repose while being used.

Bacteriological tests by C. J. Bartlett, M. D., of the Pathological Department of Yale University, show that vaporized Cresoline kills the germ of diphtheria. Its action is curative and prophylactic and hastens convalescence in this disease.

Cresolene is germicidal and sedative in its action on the mucous membrane. The air rendered antiseptic enters where liquid from sprays or nebulizers cannot. A 1% solution of Cresolene in water kills the germs of diphtheria, typhoid fever and pus in one minute.

The diseases in which the properties of Vapo-Cresolene have been especially utilized are whooping cough, croup, bronchitis, influenza, hay-fever, diphtheria, the bronchial complications incident to measles and scarlet fever, and in allaying the dyspnœa and irritating cough in pneumonia.

Literature on application.

We allow 25% discount from retail prices to physicians, and will prepay express charges on first order for one Vaporizer complete.

THE VAPO-CRESOLENE CO.

180 Fulton Street ....NEW YORK

from the vaginal wall, the patient showed considerable shock, and consequently the nurse was ordered to give her another high rectal injection of bovinine and salt solution, two oz. each. She responded to this beautifully. The operation was completed by the closure of the abdominal wound, the pelvis being drained through the vagina. Patient was put to bed with the pulse weak and 112. She was given another high rectal injection of bovinine and salt solution, three oz. of each. In twenty-five minutes she was conscious, pulse greatly improved, being 100, and full in character. No nausea, thirst or vomiting. The second day the vaginal drain was removed, the wound and the vagina treated by injections of bovinine pure, employed t. i. d. Previous to every injection of bovinine into the vagina, the cavity was washed out with borax solution. These injections were continued three times a day up to October 16th, when twice in twenty-four hours was deemed sufficient. She was now allowed a light general diet together with bovinine. October 24th the stitches were removed and the abdominal wound found to be healed. From this time on her recovery was uninterrupted and she was discharged cured November 16th.

Owing to the great increase in the substitution of inferior and harmful remedies for those of well-known and proven value, we advise purchasers, for their protection, to insist on having Celerina, and not to accept anything that is offered as "just as good," or cheaper, which unscrupulous druggists continue to offer in order to make a few cents more. You know what you want, insist on having it; if he has not got it, go somewhere else, or get him to order it for you. We think this will explain to you the necessity of getting the genuine article, in order to produce satisfactory results, for in some cases of failure it has been owing to the substitution of an inferior article, thus not only doing you no good, but even imperilling your life. But as this hydra-headed monster, like Banquo's ghost, "will not down" as long as dishonest men exist, and the best way to check it is to purchase in original packages, and be sure that you get it in that form.

In the supplement to the *Journal of Tuberculosis*, the whole subject of tuberculosis is covered by a series of articles written by Dr. Carl Von Ruck. For controlling the cough of pleurisy, one of the complications of phthisis, the doctor says (January, 1902, page 101): "Cough must be allayed by heroin, codeine or even morphine, the choice being in the order named, but only when required on account of severe pain. I have also employed papine, which has given me very satisfactory results and which possesses the very desirable advantage of not causing constipation."

In tetanus keep the patient in a dark room, where all is quiet and allow no visitors; give morphine and atropine hypodermically, alteratives and sedatives in combination in large doses. Watch the case. Give chloroform to relieve spasms.—*E. D. O'Neill.*

To remove foreign bodies in the ear, the *Canadian Practitioner* recommends dipping the end of a camel's hair brush in glue and leaving it in position against the body. When dry after a few hours, pulling upon the brush will remove the whole thing.

FERALBOID

A PEPTONIZED ALBUMINATE OF IRON.
KEEPS INDEFINITELY.
Prepared only for the Medical Profession.

A Rich Blood Maker

which is indicated whenever iron in any form is to be administered.

Put up in tablet form only, coated, 150 tablets in a bottle and in the following combinations:

Feralboid Plain,
Feralboid and Quinine,
Feralboid, Quinine and Strychnia,
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On receipt of $1.00 we will send twenty-five of each of these tablets, carriage prepaid, to any part of the United States.

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A Perfect Antiseptic Ointment for Surgical Uses.

Prepared Only for the Medical Profession.

FORMULA: Hydrargyri Bichloridi, Oleum Eucalyptus, Formalin and Benzo Boracic Acid, combined with a perfectly STERILIZED Petroleum base.

Literature on application.

A one pound jar will be sent, carriage prepaid, on receipt of one dollar, to any part of the United States.

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EVERYBODY'S MAGAZINE

will be more fully than ever in 1903 the distinctively bright, virile and wholesome periodical of America. It will be always vitally interesting. It will take hold on human experience with a firm grip. It will show that a magazine may be thrilling without being sensational. *Everybody's* presents strenuous and clean life in every phase, through fact and fiction. It is now, and will be increasingly,

A MAGAZINE OF LIFE.

A mere hint of part of the year's programme is given below:

TRUE STORIES OF IMPORTANT EVENTS. There is always an "inside" to a notable occurrence; and it is almost invariably a story of intense human interest.

The True Story of the Organization of the Steel Trust.

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THE BLOWING OF AN OIL BUBBLE. By S. MACREYNOLDS. Exposing the methods of promotion "sharks," who victimize the public with stock in visionary oil wells.

STORIES OF STRENUOUS LIVES. The true stories of men whose personal feats outdo the exploits of heroes of romance.

THE BOHEMIAN MUSICIAN. By JAN KUBELIK. The brilliant young violin virtuoso tells the story of his own career.

WORK WITH THE HANDS. By BOOKER T. WASHINGTON, of Tuskegee Institute. This is the most important message of the author to his generation.

STORIES OF WESTERN RIVER LIFE. Mr. G. W. Ogden's stories of life and adventure in the great river steamers which half a century ago plied the Mississippi, the Missouri and the Ohio make a picture of an intensely interesting phase of our national development.

NATURE STUDIES. By Prof. J. M. COULTER, of the University of Chicago; A. R. DUGMORE, H. C. MERWIN and others. Being intimate observations of nature from the scientific, pictorial and nature-loving point of view.

POPE LEO XIII. By F. MARION CRAWFORD, the well-known novelist who is the official biographer of the Pope, and has unusual opportunities for acquiring a knowledge of his career.

NEW YORK THE MOST INTERESTING PLACE IN THE WORLD. A series of illustrated articles explaining the great forces at work which destine New York to be the coming capital of the world.

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The Webster-Hayne Debate.

Critical Days in Great Careers.

The Fall of Richmond.

WOMEN'S SPORTS. By Miss ANNA WHELAN BETTS.

FICTION. *Everybody's Magazine* has secured for the coming year stories by some of the brightest most original writers of the present day, prominent among whom are the following: MARY E. WILKINS, HOLMAN F. DAY, JUSTUS MILES FORMAN, WILLIAM BULFIN, SYDNEY PORTER, W. R. LIGHTON, and many other old favorites, as well as many new writers who are rapidly forging to the front in the field of literature. Among the stories that will appear during the year are: "The Way of the Wind," by the author of "A Modern Antæus:" "Vashti," by G. M. Baxter; "An Unconvicted Convict," by E. C. McCants; "The Rapier of Ferarra, by Atherton Brownell; "The Place of Dragons," by Elia W. Peatie; "The Captain," by Maxamilian Foster; "The Wheel of the Potter," by Herman Whitaker; and "The Needle of the Damned," by Justus Miles Forman.

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A Special Offer—$7.50 for $3.50.

For only $3.50 we can accept your order for a club consisting of the Carolina Medical Journal, Everybody's Magazine, Public Opinion (new), and any *one* of Class A or Class C.

Take Note.—The regular price of Public Opinion alone is $3.00, and it is a splendid weekly magazine which will be appreciated by every American family. Note the bargain we are enabled to offer:

Public Opinion—new sub	$3.00
Arena (Woman's Home Companion)	2.50
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Strontium Sulphate	.73481	Chlorine	(Cl)	7.07743
Potassium Sulphate	1.17191	Iodine	(I)	.00105
Sodium Sulphate	64.04838	Bromine	(Br)-trace	
Sodium Hyposulphate	.11663	Flourine	(Fl)	.04665
Magnesium Carbonate	.50153	Phosphoric Acid	(P205)	.00875
Calcium Carbonate	5.08299	Nitric Acid	(NO3)	.41406
Strotium Carbonate	.13413	Carbonic Acid	(CO2)	6.60976
Iron (ferrous) Carbonate	.39715	Lime	(CaO)	13.43569
Lithium Chloride	.01399	Strontia	(Sro)	.51319
Sodium Chloride	11.68057	Magnesia	(MgO)	2.77594
Sodium Bromide traces		Iron	(FeO)	.24669
Sodium Iodide	.00122	Potash	(K2O)	.63333
Sodium Arsenate	.00198	Soda	(Na2O)	34.17817
Calcium Fluoride	.09564	Lithium	(Li)	.00234
Calcium Phosphate	.01168	Alumina	(A12O3)	.03499
Magnesium Nitrate	.49512	Silica	(SiO2)	.67648
Alumina	.03499			
Silicic Acid	.67648			123.68326
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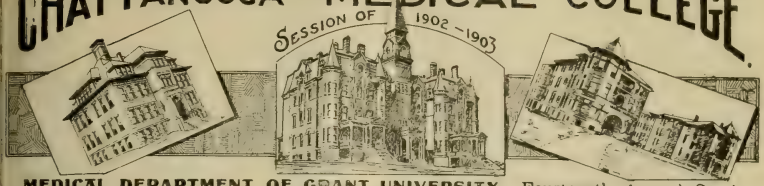

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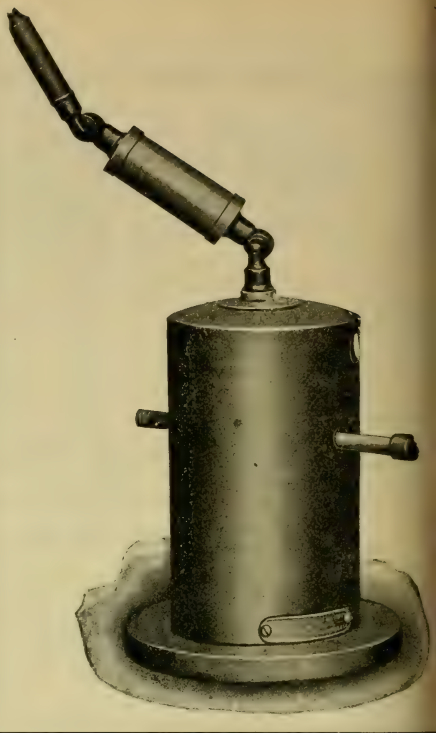

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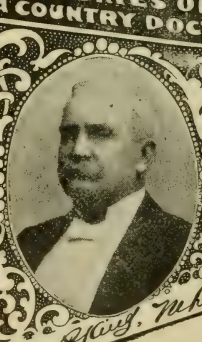

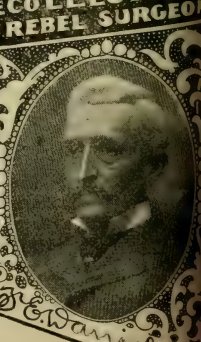

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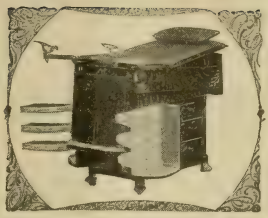
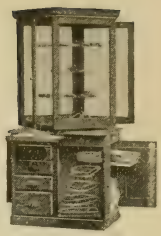

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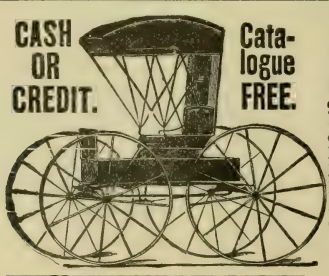

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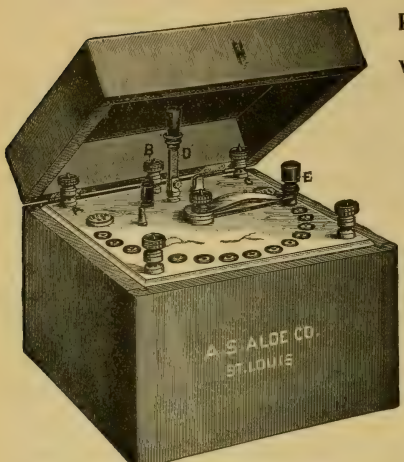

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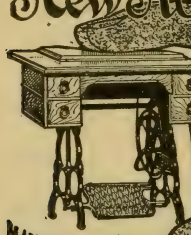

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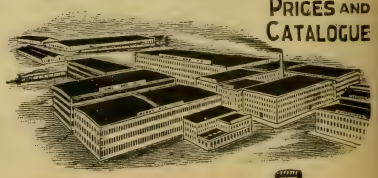

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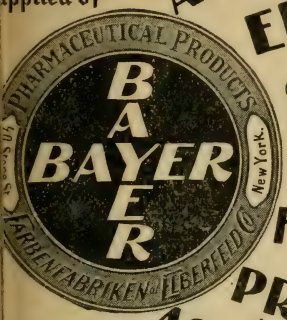

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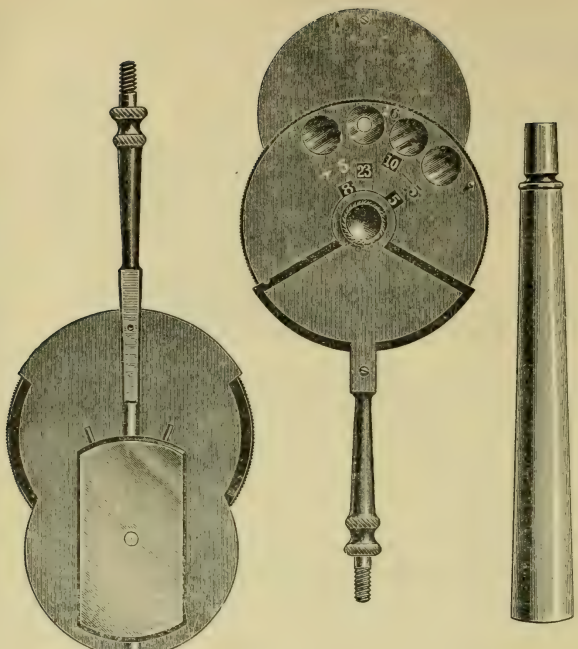

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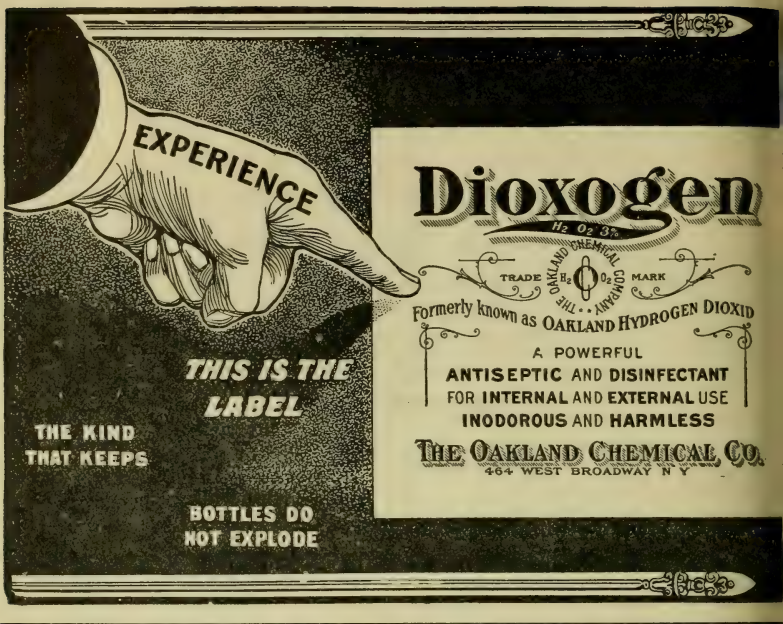

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EDITORIAL.

MORTALITY OF PNEUMONIA.

The best medical thought of the age , and for some time, has been fixed pon the prevention and cure of pneu- onia. It is an interesting question nd an eminently practical one. Thus ar the efforts of medical science have roven fruitless; the disease has baf- ed all attempts at either its suppres- on or cure. It has become a trite say- g that the modern treatment of pneu- onia is in no way superior to that of ur medical predecessors. Despite any remedies and some few enthusi- sts, the prevailing plan of treatment expectant and symptomatic and the atients get well or die no more influ- nced by the art of medicine than in ays gone by. This is so apparent hat many observers have claimed that he mortality of late years has actually increased and such an opinion is indeed quite prevalent among the rank and file of the profession, especially in large centers of population. On the contrary the apparent increase, as shown by statistics, is explained by some as due to a number of causes which have nothing to do with the fatality of the disease per se. It is claimed by these that the large number of individuals in our cities, over sixty years of age, as compared with previous decades, has something to do with this increased mortality; again it is said that the number of feeble children now reared by the improvements of sanitary and hygienic measures and who are apt in after years to fall victims to pneumonia, is responsible for our unenviable position in respect to this disease. Granting that there is a real as well as an

apparent increase in the mortality of pneumonia, none of the above mentioned causes would seem to be sufficient.

To the critics who would suppose that the mortality tables of a period prior to the time when anscultation and percussion had come into general use, were not properly subjects of comparison with those of modern times, the answer has been made that pneumonia was doubtless as easily recognizable years ago as now by symptoms upon which even to-day many practitioners depend as much as they do upon the purely physical signs. Whatever we may think of the supposed increase of mortality and its causes, the fact remains that pneumonia still rages with its old-time virulency, unchecked in its career by the hand of man. There are now, happily, but few diseases of which this can be said.

THE SURRENDER OF EDDYISM.

The latest revelation of the "profitess" of Eddyism is in effect that the public mind has not yet reached the point where Eddyite practice can control infectious diseases. Therefore, the diplomaed output of the rapid process, $300 courses of lectures are not to attempt any more to cure such disorders by present or absent treatment. One or two recent experiences of her followers, with possible legal proceedings in prospect, may have had something to do with this latest pronouncement, but whatever the cause, it is a confession of failure and—what is still better—a chance for life for many of her deluded followers. We shall never know how many human lives have been sacrificed by Eddyism, Dowieism, etc., to say nothing of the needless disease and suffering they have caused. The same announcement authorizes and advises the reporting of contagious diseases to the proper authorities, Mrs. Eddy, or the literary syndicate of Eddyism—a great scheme, by the way—having at last interpreted the Scripture injunction to "render unto Caesar the things that are Caesar's" as applying to this point. It would have been better for the public if she had done this earlier, but it is well that it is done now.

It can not undo the mischief that has been done, nor is it an absolute assurance against mischief in the future. The ablest physician is not always able to certainly diagnose dangerous communicable disorders in their beginnings; but he can advise precautions while reserving his opinion. Is the Eddyite healer to be expected to be a better diagnostician or to have the modesty to refrain from meddling where he or she is—by this confession of the "profitess"—incompetent? We fear not, and there may be future tragedies as sad as those that have stirred the public in the past. It is, moreover, not in contagious or infactious diseases alone that this possibility exists; we have all heard of cases of neglected injuries, retained placenta, etc., that the most ordinary general practitioner would not have neglected, go on to fatal septicemia in Eddyite hands. Who can tell the countless hours of needless suffering and the massacres of the innocents that this Moloch has caused, and will yet cause, unless the high-charging C. S. D.'s diplomaed by Mrs. Eddy and her syndicate have the self-denial to forego their lucrative perquisites? Is there any good reason to believe that they will recognize contagion in time to prevent its spread or that the public ought to trust them to foresee the dangers that can only be properly guarded against by the earli-

t possible recognition? As the *New ork Herald* says, the only possible feguard for the individual and the blic is to "insist that no Christian ientist shall treat any patient unless e exact nature of the ailment has en determined, either by a competent ysician or by a local health official." There is still another aspect of this est revelation that we can also prop- y notice. The whole Eddyite cult is apped up in its healing claims that e indicated in the title of its sacred ok, "Science and Health." With the est pronouncement the greater part these are sacrificed at one sweep, for th the advance in medical science the of communicable diseases is in- asing daily and includes nearly all commoner serious disorders. The ge of Eddyite treatment is thus seen be pretty seriously limited, but the st damaging effect would be natur- y expected to be on the faith itself of followers. As a clergyman, com- nting on Mrs. Eddy's order, says: 'This, then, is the comfort given to ltitudes of followers who have made offering of lives more precious than ir own, that they might be faithful Mary Baker Eddy's teaching. Under directions mothers and fathers have used to permit a doctor to attend ir children, and have seen them die her than depart from the teaching t there is no infectious or conta- us disease. Now they are told that re are such diseases."

Let us hope that this is the beginning the end of the Eddyite delusion.—*rnal of American Med. Ass.*

---

on't Take Your Troubles to Bed.

u may labor your fill, friend of mine,
if you will;
You may worry a bit, if you must;
You may treat your affairs as a series of cares,
You may live on a scrap and a crust;
But when the day's done, put it out of your head;
Don't take your troubles to bed.

You may batter your way through the thick of the fray,
You may sweat, you may swear, you may grunt;
You may be a jack-fool if you must, but this rule
Should ever be kept at the front:
Don't fight with your pillow, but lay down your head
And kick every worriment out of the bed.

That friend or that foe (which he is, I don't know),
Whose name we have spoken as Death,
Hovers close to your side, while you run or you ride,
And he envies the warmth of your breath;
But he turns him away, with a shake of his head,
When he finds that you don't take your troubles to bed.

—*Saturday Evening Post.*

He always boiled the water,
As the health department begs;
He pasteurized his coffee
And his matutinal eggs.
He filtered this and filtered that,
And sterilized the rest;
Did everything the board of health
Thinks in its wisdom best.
But he couldn't boil the atmosphere,
Four-fifths of which is germs;
So death negotiated him
Upon some easy terms.

—*Chicago Tribune.*

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Scientific Articles, Clinical Memoranda, News Items, etc., of interest to the professio are solicited for publication.

ORIGINAL COMMUNICATIONS.

The Present-Day Mortality of Pneumonia.*

BY ALEX. G. BROWN, JR., M. D., Richmond, Va., Adjunct Professor Practice of Medicine, University College of Medicine.

In the ancient history of disease, no subject has received more careful description and study than has pneumonia. The physicians of antiquity, of Grecian, Roman and Arabian nationality, set forth their knowledge of the pneumonia of that day in descriptions filled with many interesting conceits and queer observations. In the writings attributed to Hippocrates and Areteus, among the symptoms mentioned we find these: "The tip of the nose is turned up;" "the white of the eye has a greasy lustre;" and others as curious —while "the diagnosis is made by the coating of the tongue."

For many decades greatest confusion reigned with reference to pneumonia in fact, pleurisy and pneumonia reall were not differentiated until 1819, whe Laennec pointed out these distinct an separate diseases; to him is due th classification of the stages of pneumo nia which at the present time is ac cepted as correct. However, throug all the writings of history, this fact i constantly set forth, though statistic are not given, that pneumonia is a dead ly disease.

In casting about for a subject for dis cussion on this occasion, I have settle on the present day mortality of pneu monia and its prophylaxis, as a prope one. So great as a factor in the deat rate has pneumonia become, and s rapid and terrible its brief course, tha I have deemed its consideration not a unprofitable pursuit. At the outset, wish to comment upon two facts whic have a direct bearing on this questio

*Read before the Richmond Academy of Medicine and Surgery, November 11, 1902.

f pneumonia mortality: First, the ad-
ances of science have, during the last
ecade, raised the average life in the
nited States 4.1 years; in the decade
nding at 1890, the average life-length
as 31.1 years, while in the decade end-
g 1900 the average life-length was
.2 years—a marked and gratifying
crease. Second, the "great white
ague" or tuberculosis, which up to
cent date, has exacted, of all diseases,
e greatest toll on human life, even to
e-seventh of the world's mortality, is
nsidered now to be on a decline; this
ay be explained by the world-wide
ht which has been made recently
ainst its progress. For the universal
erest in civil, social and scientific cir-
s, as manifested in international con-
ences of scientific men, in popular
ucation of the masses, and in state,
nicipal and private grants or large
ns of money for the study of prophy-
is and treatment of this erstwhile
tain of death, has begun to have a
st gratifying effect upon the mortu-
table.

Now, pneumonia, as a swift de-
oyer, has appeared, according to lat-
statistics, proving itself to be man's
st formidable enemy, yielding to no
er in the number of its deaths, and
tainly affecting this end with swift-
brevity. Indeed, may not this an-
nt disease treated through the ages,
h only this grave statistical result
ly claim the sober consideration
v accorded it by the profession?

According to the vital statistical re-
t of the registered area of the
ited States, in the Twelfth census
etin of August 20, 1901, pneumo-
holds leading places in the death
mn, having been the cause of death
900, in 55,296 instances, i. e., 191.9
ons in 100,000 population. This fact is borne out by various particular localities which I will cite to establish well this point. In the report of the Department of Health of Chicago, we find that between 1851-1890 there were 25,719 deaths from consumption, and 16,577 deaths from pneumonia, i. e., more than 35 per cent. excess of consumption deaths. Now, between 1891 and 1901 there were 22,957 deaths from consumption and 25,228 from pneumonia, making an excess during this last decade of 9 per cent. of the latter. From the same report we find in the decade 1861-1871 deaths from pneumonia formed 3 per cent. of all the total deaths from all causes; in the two succeeding decades they were respectively 5 per cent, and 6.7 per cent of the total deaths And the last decade, 1891-1901, the proportion rose to more than 10 per cent. (10.2) of the total deaths from all causes.

In Massachusetts also, we find a great increase in death rate from pneumonia, it having risen from 7 to 8 per cent in the late 70's, to 9 and 10 per cent. in the last decade. Also in Rhode Island and Connecticut, we find a similar increase of pneumonia death rate and, doubtless, as says the editor of the *Journal of the American Medical Association*, were the figures available we would probably find a corresponding increase throughout the Northern Atlantic and Lake States. In Virginia we find for the year ending May 31, 1900, there were 25,252 deaths from all causes. Of this number 2,429 died from pneumonia, i. e., about 10 per cent. In Richmond, Va., we find there were 2,523 deaths from all causes during the year ending May 31, 1900, and of that number 239 were deaths from pneumonia, or 9.4 per cent.

In order to explain this state of the

mortality table, let us briefly set forth some of the influences which seem to tend to aid the occurrence of pneumonia. One of the chiefest factors, operating as a recent causal agent, may be the great fourth pandemic of influenza. It began, as Osler says, October, 1889, "in some of the distant provinces of Russia and by the following November Berlin was attacked. By the middle of December it was in London, and by the end of the month it had invaded New York, and was rapidly distributed over the entire continent." Accordingly in the following year, pneumonia deathrate in Chicago doubled its former rate, and throughout the entire country there was a marked increase in its death rate. Another factor in this increase of pneumonia deaths may be the lessened death rate of the new-born and infants from intestinal disease. Many infants kept alive in delicate health, may readily succumb before childhood is over to pneumonia. At the other end of life, the years have been increased, and a greater number of aged lungs, in the sudden change of weather, and in exposure to atmospheric and microbic dangers, may become ready victims of pneumonia. The common use of alcohol to excess, the rheumatic and gouty diathesis of modern-day life, the concentration and overcrowding of city living, the dusty and filth-laden air of the city street way, all may tend to increase the rate of death from pneumonia.

In any discussion of the present day mortality of pneumonia, to omit to mention its communicability and discuss its prophylaxis, would be to omit a most essential part. According to the latest authorities, pneumonia is classified as an infectious disease, due to the germ pneumococcus of Fraenkel, in at least 95 per cent. of cases, the remaining 5 per cent. being accredited to other germs, namely, strept cocci, Pfeiffer bacilli, pneumococcus of Friedlander. This germ is non-motile; occurs in pairs, oval or lancet-shaped, surrounded by a substance like mucin. It grows in alkaline culture media, with or without oxygen, at 35 to 38 degrees C. It is self-limited of life in any media in four to five days, possessing, however, in the dry state great latent virulence for a long time, especially when fostered in dessicated sputum.

Now to establish the communicability of this germ let us cite a few instances of notable epidemics. Tyson cites the case of a ship's crew of 815 of which 410 were attacked by pneumonia in rapid succession, and before the epidemic had subsided, 720 had the disease, the fearful number of 298 having perished. Dr. Cunningham, of Alabama, reported at the last meeting of the American Medical Association, at Saratoga, a series of epidemics that had occurred during the last fifteen years among the prisoners under his charge. In 1886, Darlington treated 105 cases among laborers living in adjoining huts. In 1888, in Middleborough, England, there occurred 367 cases of pneumonia in a population of 400.000. The history of epidemics in foreign prisons, garrisons and armies, and in native asylums, institutions and boarding schools is too extensive; suffice it to say that pneumonia is an infectious and communicable disease, modified and influenced by such predisposing factors as age, sex, race, former attacks, unsanitary living, exposure to cold, occupation, rheumatic diathesis, anaesthetization by chloroform and ether and surgical operations.

Passing through the history of the

reatment of pneumonia by blood let-ing, by tartar emetic, by blistering, by eratrum viride, by calomel in large oses, by elimination of the toxins, by se of oxygen and care of the heart ith diffusible stimulants, and antipy-etics, we take up that neglected phase f the question—prophylaxis.

Dr. N. S. Davis, Jr., in a recent arti-le makes this pertinent inquiry, in dis-ussing this subject: "But is the med-al profession altogether free from ame for its (pneumonia) prevalence?" nd later he says "prophylactic meas-res have not been enforced as they ould have been." The public educa-on and profession tutorage of the asses followed in the masterly fight these latter years against the in-ease of tuberculosis, may be well re-ated in the fight that should be made ainst the further increase of pneu-onia death rate. As in consumption, must be, not so much in the reme-al measures, as in the prophylactic encies, that we shall find the greatest sults.

In the sick room the physician must telligently teach its dangers and its eventive measures to the attendants. the training school for nurses he ist expound the truth of its deadly mmunicability and its successful pre-ntion. He must advocate such laws public sanitation, in regard to loca-n, number, ventilation, disinfection dwellings, as will best prevent the read of this germal disease. It should the especial care of the profession guard the aged and protect the in-nts from becoming victims of the evailing evil conditions that so quick-cause them to succumb to pneumonia. ith professional forethought in the atment of influenza to avoid any nplication of the lung, wise precau-tions in the administration of general anaesthetics; the performance of surgi-cal operations; and the most careful sanitary and aseptic measures in the treatment of pneumonia cases, much will have been done toward lessening the mortality.

In this day of medical enlightenment and the retrograde of fatality and fre-quency of all other infectious diseases, a masterful inactivity in the proph-laxis of pneumonia will but take from our day and time the glory of its won-derful progress as well as prove a dead-ly monster in the life of the human family. While if these seemingly over-acting measures of prevention be adopt-ed, much will be done to annihilate the germal cause, check the fatal progress and protect the stronghold of all future good health against the devastating in-road of pneumonia.

Bibliography—Cyclopedia of Practice of Medicine, Ziemssen; 20th Century Practice of Medicine, Vol. XVI; Tyson, Practice of Medicine; Osler, Practice of Medicine; *Journal of the American Medical Association,* (several copies); Census Bulletin, August 20, 1901; Monthly Bulletin, Department of Health, Chicago; New York *Medical Journal;* American Medicine.

Hydro-Therapy; With Reference to the Mineral Water From the Vade Mecum Spring, of Vade Mecum, N. C.

By H. H. Kapp, M D., Winston-Salem, N. C.

Hydro-Therapy has become a recog-nized science among us, as is appropri-ate in a people who inherit such a rich diversity of mineral waters as does our own country; North Carolina contribut-ing in no small measure some of the most valuable and useful of the world's mineral waters, a very notable example of which is found in the Epsom-Glau-

ber water from the Vade Mecum Spring, in Stokes county, N. C. Any one who will take the time to refer to the analysis made by Dr. Henry Froehling, of Richmond, Va., a scientist of the very highest authority, will find that we have presented for study a remarkable blending, in Nature's laboratory, of rare and useful mineral salts or oxides, possessing known medicinal properties; and, a water which justly demands the attention of medical men, as well as of the laity.

Until recent years Hydro-Therapy has demanded but little attention from the busy practitioner of medicine, but to-day it has maintained a position, not only on empirical grounds, but is more firmly intrenched in the minds of medical men, simply because it is based upon well ascertained and exact physiological data, a study of which forms the most brilliant chapters of modern clinical medicine.

It is not my intent, however, to enter into a discussion of Hydro-Therapy in this paper, as an exclusive treatment of disease, and thus be ranked with those empirics, the Hydropaths, who have done much to discredit the value of mineral waters, but simply to bring forward a plea for this ancient and well-tried friend of the physician, whose triumphs at the bedside have been recorded by some of the best and ablest exponents of medical science.

To give any mineral water a fair and impartial test, the records should be based upon its physiological influence upon the system and its clinical results.

When we study the history of mineral water as a therapeutic agent from the time of Hippocrates and pass in review some of the men who from time to time warmly advocated its many-sided advantages, we are forced to conclude that its claim on this score demands our highest respect. Its revival was then brought about by French physicians, who at that time did not look askance at German medicine, but even went to the extreme of studying German empirics. The celebrated French physician Scoutetten, who had been sent by Marshal Soult to Graefenberg, brought back a favorable report, which stimullated the adoption of Hydro-Therapy by French physicians, among whom it is at the present time much in vogue in acute and chronic diseases, though chiefly in the treatment of the latter, as taught by Charcot and Dujardin Beaumetz. It was not until 1861, however, that the Germans were again aroused to a realization of the medical value of water. Niemeyer, Bartels, Hoffman of Leipzig, Vogl of Munich, Erb in Germany and Semmola and Cawtani in Italy, are all names familiar to students of medicine, which stand as sponsors for the good repute of Hydro-Therapy in its different phases in recent times.

In referring to the analysis of the Vade Mecum mineral water, we find that it may be classified under *three* of the important classifications of mineral waters, viz: First, a water noted for its purity; second, for its alkalinity; and third, for its laxative or purgative and diuretic ingredients.

First, in regard to its purity, we note that in the analysis made by Dr. Henry Froehling, he states the test for organic impurities shows the water to be exceptionally free from organic contamination, only the 1,1000 part of a grain being demonstrable to each U. S. gallon.

For this reason we find it especially indicated in those cases where through high living or by leading sedentary lives the system becomes laden with

purities through imperfect elimination of tissue waste and by stimulating e excretory organs; the effete material is thus dissolved and gotten rid of a pure water.

We are all aware that people drink o little water, especially in the summer season. When we consider for a oment the large percentage of water e human body is composed of—more an two-thirds—and the further fact at this water is constantly being rown off from the lungs, kidneys, intines and pores, it would seem that argument was necessary to demonrate the above statement that too little ire, uncontaminated water is taken to the system to repair this loss. The ee use of such a water, of proper mperature, aids digestion, regulates e bowels, is helpful to the kidneys, eserves the contour of the body, and a considerable extent is fat produc- g. From the use of a pure water, erefore, the stomach, bowels, kidneys, er, pores and even the blood vessels emselves, get a much needed flushing, ing these channels as a sewerage (so speak) and the over-clogged mainery of life gets a new and fresh art. Therefore, purity being a feare of but few mineral waters, it is a ost valuable adjunct, *per se,* to the ade Mecum water, making it a reliae diuretic in most acute infectious eases.

2. Aside from its purity we find that e water exerts also a favorable influce by reason of the salts of sodium d calcium (alkalinity) which it conns. Hence good results follow its e in the uric acid diathesis, where the ine is scanty, high-colored and acid. so in cases of irritable bladder, by shing out this viscus with mild urine large quantities and helping dissolve vesical calculi. Because of the power possessed by alkaline salts in aiding oxidation, the water is useful in cases where the effete matter of the body seems to escape only partially oxidized, and where the kidneys and liver seem torpid.

3. The Vade Mecum mineral water as an active diuretic, laxative and purgative water (depending upon the amount, time and temperature of the water when taken) is due to the salts of sodium, magnesium, calcium and potassium for these properties, there being nearly 97 grains of these salts to each U. S. gallon. These find their therapeutic application in cases of Hepatic Torpor, or congestion of the liver, associated with gouty or rheumatic tendencies, especially in those individuals who have been high livers, so clogging their organs; and, finally, in those patients who, through illness of exposure to heat and cold, have sub-acute or chronic atony of the liver, of the organs of digestion, and of the lymphatic glands. Nearly always these patients suffer more or less from constipation and gastro-intestinal catarrh.

In the treatment of acute catarrhal jaundice (yellow jaundice), I consider the Vade Mecum mineral water a remedy *par excellence* during the latter stages; having obtained most gratifying results from its use. The usual course of events is, that the jaundice follows a gastro-intestinal catarrh due to indigestible food, or perhaps from exposure or infections. Whatever the cause, the bile ducts become congested, obstructing the on-flowing bile and jaundice follows with constipation. After administering Vade Mecum water early in the morning before eating, and at the usual temperature, the patient had loose watery movements and the

bowel was not only unloaded of fecal matter, but by the alkalinity of the water, there was loosening of the catarrhal secretions and unloading the liver of congestion; while the urine (as is common in these cases) was at first diminished in amount and dark in color from the biliary salts; became more copious in amount, assuming the natural appearance, as the jaundice cleared away and the appetite returned.

Then, in acute gastric Catarrh, due to the irritant effect of indigestible food stuffs or food in a state of incipient decay or fermentation, the stomach being overloaded, with its lining membrane showing a hyperemic redness, coated heavily with mucus, and the mucus and peptic gland cells being cloudy and granular, with the accompanying symptoms of impaired digestion, distention, coated tongue, etc., the bowels constipated, urine scanty and high- colored, with heavy deposits of urates—in these cases I have found the Vade Mecum mineral water an agreeable and efficient aperient, relieving the congestion and ugly symptoms by depleting the upper alimentary canal and cleaning the stomach of its mucous secretions, while the urine was also increased in amount and the urates diminished. Especially is this useful if given with one of the mercurials.

Also in chronic gastric catarrh or chronic catarrhal dyspepsia, the fundamental condition here also being a hyperemic swelling of the gastric mucosa, the surface of which is coated by a tough, yellowish-white covering of mucous, with the well known symptoms of the trouble accompanying; and the chemical analysis of the test meal shows a decrease in the pepsin. etc. In three or four of these cases under my observation, excellent results have been obtained by first causing the patient to eliminate the cause, whether it be alcohol or bad habit in eating, taking simple and well cooked food, thoroughly masticating and eating slowly, and using the Vade Mecum water (with whatever drug may be indicated).

By this method the patient develops regular habits, the congested mucous membrane of the upper alimentary canal is depleted and the system is rid of an abundance of effete matter. There is no doubt that the mineral constituents of this water excite a positively therapeutic action in the body, without being present in such excess as to excite an irritation of the delicate mucous membranes of the intestines and kidneys through which they have a pass.

From time immemorial, the value of saline laxatives and diuretics has been recognized in the treatment of catarrhal effections of the alimentary canal, but their abuse has often been observed also. It is almost impossible to drink as strong a saline water as that of Carlsbad or Saratoga for more than four to six weeks without unpleasant results, this being due to the large amount of salts per U. S. gallon, which is held in solution by these waters, rendering them, however, excellent cathartics wherever a brisk and active purge is indicated. But the same quality which renders them useful when a powerful impression is desired, nevertheless unfits them for that persistent and continued employment which is necessary in the treatment of a disease as stubborn and of long duration as that of Gastric Catarrh. And in this respect I consider the Vade Mecum water a remedy far superior to the Carlsbad, Saratoga, or other water of this class.

In regard to pathological conditions of the genito-urinary tract, two cases of

enal calculi may be mentioned. In oth cases a microscopical study of the alculi showed them to be composed holly or in part of uric acid crystals nd cystic deposits of the same sub- tance. Both patients were habitually onstipated, the urine highly acid, and he stones of comparatively small size. Whether by the action of the salts of odium, potash, soda or lithia contained n the Vade Mecum water, (all being xcellent solvents of uric acid), never- heless, the required alkalinity of the rine for the solution of the uric acid rystals was materially aided in both ases; and by this soivent power the ough portions of the calculi were re- noved, rendering their passage along he course of the ureters more endura- le and attended with less pain.

Too, in other chronic conditions of he genito-urinary tract where the ori- in is specific, good results have been bserved from the use of this water nce it renders the flow more copious, kaline, and less irritating to the dis- ased parts and in this way rids the ucous membranes of the accumulated ecretions. Numerous colonies of bac- ria are flushed out and the inflamed art is bathed with an uncontaminated uid; at the same time keeping the astro-intestinal tract in a cleanly, ealthy condition.

To sum up, in brief, my observations clude: Six cases of catarrhal gastri- s, three cases of acute catarrhal jaun- ce, four of obstinate constipation with elvic congestion, two renal calculi, one ephritic congestion, five chronic ure- ritis with excess of uric acid, three f sciatica, and five of chlorosis. Many hers with less decided or indefinite mbinations of symptoms, among hich excess of uric acid and evidences of hepatic torpidity were prominent, and others in which indigestion seemed to be the chief cause of complaint.

I am convinced that in the Vade Mecum mineral water we possess a most valuable adjunct to the field of hydro-therapy, and a study of its analysis will suggest many indications for its employment by the practitioner of medicine, other than I have been able to allude to in this paper, filling as it does a long felt need in therapeutics.

H. H. K.

ADDDENDA.

Analysis Vade Mecum Water—Grains per U. S. gallon, 231 cubic inches: Magnesium Sulphate, 7.33524; Calcium Suphate, 25.71113; Strontium Sulphate, .73481; Potassium Sulphate, 1,17191; Sodium Sulphate, 64,04838; Sodium Hyposulphite, .11663; Magnesium Carbonate, .50153; Calcium Sarbonate, 5.08299; Strotium Carbonate, .13413; Iron (ferrous) Carbonate, .39715; Lithium Chloride, .01399; Codium Chloride, 11.68057; Sodium Bromide traces, ——; Sodium Iodide, .00122; Sodium Arsenate, .00198; Calcium Fluoride, .09564; Calcium Phosphate, .01168; Magnesium Nitrate, .49512; Alumina, .03499; Silicic Acid, .67648; total, 118.24525; Cardon dioxide, combined with Mono-Carbonates, 2.68321; total, 120.92846. Carbon Dioxide free, 2.68 cubic inches.

The above is the result of my analysis of Vade Mecum Mineral Water.

HENRY FROEHLING,
Analytical and Consulting Chemsit.
Richmond, Va., Dec. 18, 1901.

Don't forget the specific action of soda salicylate in tonsillitis.

Don't incise a gumma—absorb it with potassii iodidi.

Selected Papers.

Some Features of Medical and Surgical Study in London and Berlin.

By Dr. A. S. Grimm, '85, St. Mary's, W. Va.

The saying that "Great bodies move slowly" applies to medical and surgical study in London most appropriately, although I do not mean to say by this that these studies are not thoroughly taught here, but on the contrary I wish to emphasize the fact that they are most perfectly taught.

John Bull here is the same characteristic John Bull as elsewhere. He does not take hold of some new theory or remedy because it is new until he thoroughly investigates its merits and if it appeals to him as good he adopts it with a firm and lasting grasp and if not, he rejects it altogether.

The professors, in taking their classes through the wards, take very great pains to give them thorough clinical instruction in auscultation, percussion and the usual physical diagnostic methods of making diagnosis.

Nothing is gone over hurriedly, but a careful examination is made of each patient and all points of any interest are gone over, every vital organ of the body being examined.

I have seen Sir Thomas Barlow, of the University Medical College, and ex-physician to Queen Victoria, spend a half hour around the bed of one patient in having the students examine him and then interrogating them on all points of interest relative to the case.

Each member of the class is thus taught to utilize his theoretical training in making microscopical and urinary examinations and of pathological specimens in general, and in this way he is thoroughly trained and grounded in physical diagnosis.

The result of this is that the English physician and surgeon is a good diagnostician and its fruits are daily seen in the hospitals, as it is very rare indeed for an operator to fail to find his diagnosis verified when operating

The English surgeon does not impress one as being a rapid operator, although I have seen some very rapid work done by such men as Bland Sutton, W. H. Tate and some others, however, he does impress one as being a conscientious worker delving after truth and not to make a display or show of his work.

By having tickets of admission to several large hospitals one sees work done by a great variety of different men and gathers ideas which may differ somewhat in detail, but which tend to give him a broader scope of thought and utility.

Thus Prof. Barker, of the London University Medical College, uses linen thread for intestinal sutures and other abdominal work. Prof. Ballance and

others of St. Thomas Hospital use silk, while still others use silk worm gut.

In operating for appendicitis Prof. Morris, of Middlesex Hospital, sutures the peritoneum over the stump of the appendix after excision, while in the Royal College of Surgeons some of the operators apply carbolic acid instead of suturing. In mastoid operations the grafting process is successfully performed at St. Thomas Hospital and can be witnessed almost daily.

The amount of surgery done in London daily is immense, and the student who has a ticket admitting him to several hospitals is often puzzled to make up his mind as to the best way to utilize his time to the greatest advantage.

After seeing the list of operations to be performed he has to select the ones he wishes to see and let the others go for that day, and in his eagerness to see work done by different men, he is likely to overwork himself unless he is very careful. Some of the large hospitals have, on an average, about one dozen operations daily, and quite a number of these institutions are modern and up to date, being well provided with fine operating amphitheatres and with all the appliances necessary for doing aseptic surgery, among which may be mentioned St. Bartholomew, St. Thomas University College and some others.

When a foreign student enters Germany for the purpose of post graduate study, his best way is to call upon the most noted medical and surgical men in the universities and they will take his address and send him invitations to their clinics where they will treat him cordially.

After matriculating and entering upon a course of work he will be impressed with the thoroughness and system with which the work is done. The German mind here, as in everything else, seeks to know the cause of all phenomena with which it comes in contact.

They are a people that are eminently suited to deep research in medicine and surgery, as well as any other line of work that requires untiring and protracted labor and toil, so it is no matter of astonishment that we find here so many deep investigators in professional work.

The German government recognizing the good to the state by encouraging original research, provides for this by appropriating money for this purpose. When a professor is once appointed for this line of work he has an enviable position indeed, and some of them live in royal style, having fine palaces and surrounded by all the comforts of life. He is highly esteemed and honored by his countrymen and this is an incentive to others to improve their time and prepare themselves for similar honors. Thus the German's ambition is to thoroughly prepare himself for his work and to be held in high esteem by his people and not so much for the purpose of wealth; this certainly is to be commended, and would be fortunate for our noble profession if it obtained everywhere.

The average German has too much self pride to ask for charity, consequently there is not so much free treatment in the hospitals as in some other countries; he also prides himself in keeping his body, clothing and living apartments clean.

I was told in Berlin that I might meet poor people there as elsewhere, but I would always find them a clean, happy and contented people, and I found this to be true.

It is in the field of bacteriology that Germany has made the greatest ad-

vance and has gone deeper into the subject of pathology and clinical bacteriology than any other nation of people. I was told in a large pathological laboratory in Berlin by one of its teachers that he could not expect to have much of a record in this line of work in our country, as we were too young as a nation and of course this is true, but I earnestly hope to see the day in the not distant future that our national congress will see the necessity of aiding our noble profession in like manner as does the German government.

Some of the most eminent men in gynaecology operate entirely different from each other. For instance, Prof. Landaugh performs vaginal hysterectomy by the clamp method for controlling hemorrhage, and when he has finished an operation he will have a large handful of clamps hanging out of the pelvic canal. Profs. Olshausen and Duhrsen do away with the clamps and ligate each step of the operation, finally closing the vault of the vagina by suturing. The latter method would seem to be the better of the two, as the danger from infection would seem to be less than it would be to leave the vaginal vault open containing a handful of clamps. However, Prof. Landaugh claims for his method as good per cent. of recoveries as do the operators by the other method, thus proving that either method is successful in competent hands.

Speaking from a scientific standpoint the surgery done in Berlin is excellent, yet one often sees surgical work done in the large clinics by a few operators that seem to be heartless, if not brutal, and the fortitude and patience with which the inmates bear it is something to be wondered at. For instance, one will often see an abscess of the superior maxillary antrum opened and an opening made by chisel and forceps as large as a half inch in diameter into the cavity of the bone requiring several minutes to complete the operation and causing excruciating pain, yet all this would be borne without an anesthetic, and a great many other operations equally as painful are daily witnessed.

The only reason I can give for the tolerance of so much pain by these people is the high esteem in which the profession is held in Germany and that its opinion is respected.

Medical and surgical science here is built upon a true basis and everything is done radically according to scientific methods, but my impression is that the profession does not use nearly so much medicine as is habitually done in America.

In conclusion, I would say that while an American student can gather many useful things from the profession on the other side of the Atlantic, at the same time I am confident that were some of the profession in Europe to come to our shores to learn our methods, they would return home much benefited.—*Jour. Alumni Assn. College of Physicians and Surgeons, Baltimore.*

Drug Habit Following Surgical Operations.

By C. E. Patterson, M. D., Grand Rapids, Mich., Superintendent Patterson Home.

Having had the benefit of several years experience in studying the cause of drug habits, I almost feel it a duty whenever an opportunity presents itself, of contributing to my brother practitioners the results of some of my experience, that they may profit thereby, and in so doing be the means of saving many a poor victim from a bondage to which the worst case of negro slavery

vas never the slightest comparison; urthermore, that it may arouse in iemselves a caution that they may not e victims of their own folly, for I am orry to say that during the past six ears the majority of my patients have een physicians. Furthermore, it seems iere is actual necessity of agitation of iis subject, that the general practition- r may be brought to a sense or under- anding of the gravity (and terror I ight say), of the affliction, and not onsider it in the light of "pure cuss- dness," as he often terms it, on the art of the patient. I am sorry to say great many do think this at the pres- nt day; but I wish to say positively iat the drug habit, as it is termed, is disease in the strictest sense of the rm, and one of the most stubborn of l curable diseases, and I would say irther, there is no surgical disease or peration with more technicalities in its andling than is the treatment of this -called drug habit.

I again assert the necessity of agita- on of this subject, that the general ractitioner may more fully understand e gravity of the case, as if he did it uly seems he would be more cautious at he be not the prive mover in laying e foundation for a life of misery and gonies untold for, perhaps, one of his st and dearest friends, one who usts him with implicit confidence, and ho counsels him both in sickness and health only to find at last he has been trayed by one whom he considered xt to his God—his doctor.

No! Dear readers, I again repeat, ou cannot understand the gravity or rribleness of being addicted to mor- hine or cocaine, else you would be ore careful that your patients, aye, en yourselves; do not take drugs that erely blinded you to the real condi- tion, and the seemingly improved con- dition, only a borrowing of reserved forces, that when reaction takes place, vitality will be much lower than before your deceptive force was applied. For example you have applied the whip to the horse instead of feeding grain. Your horse apparently feels good as long as the whip lasts, but "Oh, what a difference in the morning!" What an awakening when the patient leaves off one of your favorite prescriptions which they have taken for several weeks or perhaps months, which con- tained a few grains of morphine, co- caine, laudanum, or even codeine—that much vaunted remedy by most medical journals, to use to break off the habit of morphine. But, dear readers, do not be deceived longer. It will catch you just the same as any of the opiates.

To illustrate what I have said, and to return to my text, I would report the case of Miss W., a nurse of U. B. A. Hospital, of Grand Rapids, Mich. She was taken ill with appendicitis. Her physician realizing the fact of the great danger of a drug habit being formed in her case, sought to avoid it by using codeine to allay pain, from the beginning. At the end of four weeks she had recovered from the appendi- citis, but when the codeine was stopped trouble began, and I was called to get her free from the codeine, which was just the same as though morphine had been used from the first.

I could also report the cases of two other nurses who had inflammation of the middle ear. At the end of three weeks, when both had recovered from the ear trouble, behold the opiate could not be left off, and I was called to treat both for "morphine" (codeine) addic- tion!

I have at present a nurse with me for

morphine addiction, who contracted the habit in a hospital, while being treated for a simple abscess of the arm, following an injection of morphine from an unclean needle, to relieve a trivial neuralgia.

I can mention at least a dozen nurses from hospitals who have graduated with honors, but who left their Alma Mater ruined in health, simply from too frequent administrations of opiates recommended by the house physician for trivial ills, that a good hot salt, or hot water bag would have relieved just as quickly.

Another case I wish to present, from which a valuable lesson can be learned by those who will profit by others' experience. Mrs. L., a married lady 25 years of age, who had contracted the habit for morphine in a hospital while being treated for an abscess of the rectum, applied to me for treatment in December, 1897. At the end of eight weeks she was free, and returned to her home duties as a housewife. Her health was excellent, and as she had been an invalid for years, and deprived of the pleasures of all amusements, took advantage of her good feelings and attended nearly every theatre and place of amusement (suitable for ladies), that visited the city. As a result of so much being on her feet, she was taken with a bladder trouble, attended with extreme tenesmus, which every doctor has seen, and which but very few women escape having more or less during a lifetime. She sallied a physician, instructed him when he came not to give her any opiates, as she had just been cured of the trouble, and by all means she did not want to take any chances of getting back again. The physician said he would not give her anything, but thinking, as most physicians do, that it was only in her head, and that if she did not know what she was taking, certainly there would be no danger, and especially so did he use codeine. He used the pills, which relieved her at the time, but as soon as they were gone, more had to be furnished, and soon the tenesmus was such that large quantities had to be used and they soon found they could not stop them, and to the patient's horror and extreme regret, she found was once again in the hands of that cruel monster, morphine. She again applied to me for treatment, suffering from the bladder trouble, as she had for several weeks previously, when to my surprise I found, upon examination, a little urethral caruncle, perhaps the size of a pin head, which a few applications of lunar caustic solution completely cured or at least I had no further trouble with the bladder after the first week.

There are two lessons I would have physicians learn from this case: first, do not be in too big a hurry to use opiates. As I have said before, they only blind one to the real condition of things, and in but very few cases are they curative in any sense of the term. Second, do not use opiates in any case where the patient has once been the victim of morphine, thinking if they are not aware of what they are taking, it will make no difference with them. I assure you to the contrary. They will feel it as perceptibly as you would feel the current from an electric battery. The nervous system in one of those cases is as susceptible to an opiate as a powder flask to a match.

Of cases like the last reported, who have been thrown back into the habit by some physicians' careless prescribing, I could report several, while of cases coming under my charge who

ave contracted the habit following op-
rations, I could report sufficient num-
ed to fill a volume, but believe I have
ientioned enough to arouse my read-
rs to a greater sense of duty toward
ieir fellow man, that he may be pro-
ected from injudicious prescribing, and
iould I have done this, I will feel I have
een the means of saving many a vic-
m from a life of misery, shame and
egradation through the too much used
rug, morphine.—*American Journal of
urgery and Gynecology.*

The Abuse of Strychnine.

Apropos of our recent editorial on
iis subject we quote from the *Hospi-
il*: "We are glad to find that there
re some signs of reaction against the
ither reckless dosing with strychnine
hich has of late years become almost
routine in the treatment of shock.
here can be no doubt that we have in
e hypodermic administration of
rychnine a most powerful agent for
ood in the treatment of surgical shock.
it presents itself fully formed in
ises of serious accident, or of collapse
it gradually grows under our eyes
the course of prolonged operations.
Vhat is its exact *modus operandi* may
ot be quite clear, but at all events
ere is much good evidence to show
iat it does good, and we have not a
ord to say against its employment in
oderate doses in cases in which it
ay be required. We cannot but think,
owever, that of late the hypodermic
jection of strychnine has sunk rather
to a routine, and that the curious in-
sceptibility to its toxic action, which
as been so marked a feature when the
llpase has been profound and the pa-
tient has been more or less soaked with anaesthetic, has tempted some administrators to forget that they are dealing with a powerful drug which, except in the presence of such antagonistic conditions, may easily cause trouble afterward. Certainly the cases which have been reported of clonic spasm and respiratory difficulties after its administration ought to inculcate caution in the use of the strychnine syringe—a means of making his patient "buck up" to which the modern house-surgeon has recourse with perhaps a little more freedom than may be quite judicious."—*Ther. Monthly.*

Constipation—Its Treatment Without Drugs.

First, correct all the bad habits. Nothing can take the place of this injunction. * * * Take time for every meal or don't eat it. * * *

Bending the body at the middle backward and forward, sidewise, twisting, gyrating, stooping, swinging and thrusting the arms upward, bakward, forward, round and round, reaching, striking, pulling and pushing—all these motions are of value. Rapid walking, horseback riding—if the horse is not too easy in gait!—kicking, swinging the legs, squatting and rising rapidly many times repeated. Any motions or exercises that act upon the adbominal muscles, that stimulate the diphragm, accelerate the breathing function and favor the perilstaltic movement of the bowels will aid in banishing the demons and hobgoblins that dance and devastate in the wake of thise national if not cosmopolitan malady, constipation.—*The Dietetic and Hygienic Gazette.*

Review of Medical and Surgical Progress.

Decentering Lenses for Near Work.

The ideal position of lenses, says Savage in *Jour. Am. Med. Association,* when there is perfect adjustment of the eyes is such that the visual axes may cut their optical centers and that the planes of the lenses may be parallel with the equatorial planes of the eye. When the visual lines cut the optical centers of the lenses there can be no prismatic effect and when the plane of the lens is parallel with the equatorial plane of the eye there can be no cylindrical effect. A want of parallelism between the plane of lens and the equatorial plane of the eye means that there will be a cylindrical effect because the strength of the lens, at right angles to the axis of tilting is increased, while along the axis of tilting its power is unchanged. Tilting a lens 45 degrees practically doubles its refractive power for the rays that are in a plane at right angles to the axis around which it has been rotated. These laws apply alike to lenses for both near and distant visions and the chief objection to bifocal lenses lies in infringement of these laws. Try to decide how much the visual axes must be depressed below the horizontal plane of the head for reading or near work and then through the same number of degrees the upper border of the lenses to be used should tilt forward to prevent vertical cylindrical effect also tilt nasal border to half the angle of convergence and thus avoid horizontal cylindrical effect. This causes parallelism between planes of lenses and that of equator of eye. 1. Place presbyopic lenses so that visual axis will cut optical centre of its lens, point of fixation being in extended median plane of head. Never place lenses so that both visual axes will cut either nasal or temporal sides of optical centers in cases of orthophoria. Orthoptic eyes will not take well presbyoptic lenses placed so high that visual axes cut them below optical centres.

2. In uncomplicated esophoria decenter both presbyoptic lenses directly and to an equal extent that the two visual axes may cut lenses to nasal side of their optical centres and favor the weak externi muscles; may do this equally as well when frames are made wider than is called for by pupillory measurement, interni being properly attached compensating esotropia will give relief; if interni are attached too low, will develop a plus cycloporia and discomfort. Inward decentering or having frames narrower than called for by pupil in such eyes make lenses more or less unbearable.

3. In esophoria with hypeophoria of one eye and cataphoria of other, must decenter down and out lens of hyperphoric to develop compensatingeso-hypertropia of this eye. Decentering lens of catophoric out and up gives plus cyclophoria and strain on superior

oblique. Slight hypertension is well borne by inferior oblique, but not by superior.

4. In esophoria with hyperphoria in one eye and cataphoria in other, with plus cyclophoria decenter only lens for by hyperphoric eye and that down and out to get compensating eso-hypertropia.

5. In simple exophoria each presbyopic lens is decentered equally directly in or make frames narrower than pupil indicates.

6. Exophoria with hyperphoria of one and cataphoria of other eye decenter in presbyoptic lenses, only in and up for cataphoric eye.

7. With plus cyclophoria added to 6 decentering is same.

8. Hyperphoria of one eye and cataphoria of other with or without cyclophoria in presbyopic lenses decenter down and only for hyperphoric eye.

9. In simple double hyperphoria decenter down and equally both presbyopic lenses or make nose-bridge deep so visual axes will cut lenses above optical centers. The above rules are scientific and will give comfort if prismatic effect is not too great. Maximum vertical prismatic effect should be one degree, never more than two; maximum lateral should be two and never more than four degrees. Treat low degrees with prismatic exercise and errors of high degrees surgically.

Notable Improvement in the Therapy of Typhoid Fever.

The recent discovery, by Duval and Passet, of the presence of the bacillus dysenteriae (Shiga) in forty cases of infantile summer diarrhœa, awakens renewed interest in the subject of intestinal antisepsis. But a few months have elapsed since Drs. P. C. Freer and F. G. Novy, of the University of Michigan, demonstrated the enormous germicidal power of benzoyl-acetyl-peroxide, more familiarly known as acetozone. Although the preliminary reports of these investigators were of necessity based upon results of laboratory experiments, their expectations are already being realized in clinical work, in the treatment of typhoid fever, particularly.

In the city of Chicago, where a large number of cases of typhoid have been reported, Acetozone has been used exclusively in the treatment of about 300 of them. The concensus of opinion is that it causes the temperature to decline earlier than usual in the course of the disease, and it ameliorates the mental and physcial condition of the patient, in all probability by controlling the toxemia.

Two Chicago practitioners, I. A. Abt, M. D., and E. Lackner, M. D., have thus far reported (*Therapeutic Gazette,* October, 1902), forty cases of typhoid in children, treated with Acetozone, with but two deaths, a mortality of 5 per cent. One of the patients that died succumbed to pneumonia and pulmonary edema, the other to great pryexia on the fifth day. Stupor and tympanites were almost entirely absent in all the cases; the characteristic typhoid fetor of the stools was markedly diminished, and the hemorrrhage occurred but twice, and in the same case. The average duration of the febrile period, in 37 cases, after beginning Acetozone treatment, was 13½ days. The drug did not seem to act upon the heart or respiratory apparatus.

Early this year Eugene Wasdin, M. D., of the U. S. Marine Hospital Service, Buffalo, N. Y., reported 27 cases (*American Medicine,* February 8,

1902), of typhoid fever, 24 of which were treated with Acetozone, all of the patients recovering. The writer says: "Its application in typhoid fever has been followed by very happy results; its use has been directed to the destruction of the germ in its primary lung colony and also in its secondary intestinal colony, and it has been used by hypodermoclysis to combat terminal expressions, with the result that in 24 cases the disease has been limited almost entirely to the expression of intoxication from the primary focus, the intestinal symptoms remaining entirely in abeyance, and the disease has been shorn of many of its most disagreeable features."

In a second paper, which appeared in the *Therapeutic Gazette* for May 15, 1902, the same writer states that his patients were given from 1,500 to 2,000 Cc. of the aqueous solution of Acetozone daily. The diet was milk diluted with the same solution. The first influence of the drug is observed in the increased secretion of urine. That this is not due wholly to the ingestion of large quantities of water, necessitated by the use of the saturated solution is evident from the author's assertion that the same result was observed when Acetozone was administered in capsules. The second influence to which attention is directed is the very pronounced decrease of the odor of the stools, while plate cultures from the dejecta showed comparatively few germs.

The deodorant and diuretic effects of Acetozone were also observed by G. H. Westinghouse, M. D., of Buffalo, (*Buffalo Medical Journal,* August, 1902), who used it in seven cases. This observer remarks that with the increased flow of urine "a corresponding reduction of typhoid symptoms followed, and tympanites and delirium disappeared." It should be remarked that the diagnosis in all these cases, as well as in most of those reported by the Chicago physicians, was confirmed by Widal's reaction and Ehrlich's test, and in some a blood-count was resorted to. Westinghouse concludes his paper by saying that "Acetozone, as an intestinal antiseptic, is unequaled by anything I have ever employed. A complete subsidence of all the bowel symptoms followed in every case of typhoid within a few days after beginning its use. The application of the antiseptic consisted, in most cases, in simply allowing the patient to drink the saturated aqueous solution *ad libitum;* or, in other words, substituting this solution for all other liquids, and urging the patient to partake of it freely when the natural craving was not sufficient to insure the consumption of considerable quantities."

Keeping Out Disease.

No government undertaking more distinctly reveals the compactness of the world of to-day than that of the Public Health and Marine Hospital Service, which is under the control of the Treasury Department. So far as epidemic diseases are concerned, its finger is on the pulse of every nation; its bulletins each week report the number of deaths from the great contagious and infectious maladies in every city of prominence under the sun.

Formerly a raging epidemic in a foreign country had little effect here, beyond bringing out expressions of sympathy, and in extreme cases, perhaps, some material aid. Now, when a missionary in Canton—and this incident actually occurred— discovers a case of cholera, he reports it to Hongkong. The

American consul there, under systematic instructions, cables the fact to Washington, and also passes the word along to his associates on the Asiatic coast. Washington promptly notifies by wire every quarantine officer on the Pacific coast of the United States, and informs Honolulu by the next steamer. To be forewarned is to be forearmed, even when the weapons are disinfectants and germicides.

One case of yellow fever anywhere in Cuba is now regarded as of sufficient importance to be reported by cable. The mere rumor of an outbreak of the plague in an inaccessible corner of the Orient usually results in an order to the nearest consul to make an investigation. In severe epidemics our medical experts are often sent to the scene to study the bacteriological developments of the disease. Such an expert, returning from Vera Cruz a few months ago, where he had been studying yellow fever, was stopped on the boundary line, curiously enough, by an inspecting officer of the same service.

Most of the dread diseases against which the quarantine is directed are importations. To keep them out on long coast lines, and with the tide of immigration constantly pouring in, is a large task. Although no devices insure perfect protection, the number of cases which now get through the quarantine mesh is proportionately very small.

The Treatment of Typhoid Fever With Special Reference to the Use of Water.

G. W. Boot urges the free use of water by the mouth, by the bath, and by enema. Milk is the best diet, because in addition to furnishing all the proximate principles necessary for the nourishment of the body in assimilable form it furnishes more water than any other form of diet. But plenty of water should be given in addition. In his country practice, where bath tubs are out of the question, the author has the patient placed on a rubber sheet, into which he sinks, forming a hollow. A pitcher of water at 80 or 90 degrees F. is poured over him, and the water which accumulates around him is repeatedly soused over him by means of a large sponge, and cold water is constantly added. This reduces the temperature, stimulates respiration, and by change of position prevents hypostatic congestion of the lungs and pneumonia. Purgatives and enemata lessen the amount of infection, carry away the toxines formed in the intestines and eliminated by the bile, remove the toxins eliminated by the intestines, and lessen the local infection by providing drainage for the infected Peyer's patches. They are not contraindicated, but rather indicated, in diarrhae.—*The St. Paul Medical Journal.*

A Remedy Proposed for the Evil of Substitution.

There can be no subject of more importance to physicians than the violation of their confidence on the part of a dishonest dispensing druggist. Law will not make a dishonest man honest, but the right law properly executed will prevent a criminal's further infliction of injury upon society. The requirements of a license to all druggists who dispense drugs or medicines, revokable upon the licensee's being convicted of substituting any ingredient, drug or medicine other than, and in lieu or instead of, that specified in the prescription, order or request in writing, of any physician, would go a long way to

aid in the matter of honestly filling prescriptions. Let the medical societies induce their respective State Legislatures to enact a law requiring such a license, with a simple and practical procedure for establishing the guilt and enforcing the penalty against infraction, and the practice of substitution would soon cease.

Let proceedings for revocation of license be before the court, board or officer, empowered to issue the license, and be set in motion at the relation of either the board of health, a local medical society, or the purchaser upon whom the fraud and imposition had been done, or if the physician by whom the prescription or order was issued or given, or of any person, firm or corporation for whose brand or make of drug or medicine the substitution had been perpetrated. Let the licensing board, court or officer be empowered to issue citations, subpœnas for witnesses, to administer oaths, and be given all other requisite powers for duly trying the issues and revoking the license of the guilty.—*J. D. Williams, M. D., in The Medicus.*

An Excellent Achievement.

One of the most remarkable achievements in sanitary science is that which has been accomplished in rendering Havana practically free from yellow fever. The decrease in the death rate from yellow fever in that city is due to the systematic work which has been carried on under the direct supervision of the medical corps of the army, to whom the credit must be given. It is to be hoped that the good work already done will be continued by the Cubans. This, however, is hardly to be hoped for, as it is almost an impossibility to expect people who are naturally as lazy and shiftless as are the majority of the natives of that island, to see the benefits of such active measures as those carried out by the Americans.—*Med. Age.*

Don'ts.

One of our new subscribers, Dr. T. Fred Fletcher, of Cambridge, O., sends the following "dont's," for which, however, he claims no originality. They are a few that have been indelibly impressed on his mind during three years' residentship in hospitals:

Don't overlook the contagiousness of scabies, tenia tonsurans, tenia versicolor and impetigo contagiosa.

Don't administer renal irritants in scarlet fever. Save the kidneys.

Don't forget that a dislocated elbow is old in two weeks; a shoulder in three months.

Don't neglect the heart in the treatment of acute rheumatic fever. Make auscultation your routine at each visit.

Don't think your obstetrical armamentarium complete in the absence of a hand brush, nail cleaner, fountain syringe and a goodly quantity of tr. sponis virids. All are requisite—are life savers.

Don't puncture pelvic exudates; make a free incision and drain.

Don't depend on the temperature in appendicitis. Insist upon rest in bed, liquid diet, ice and purgation. Visit your patient every six hours, and if there be no improvement or if the symptoms be exacerbated at the end of the first twenty-four hours, operate

Don't fail to thoroughly disinfect both the feces and urine of your enteric cases. Eberth's bacilli appears in the urine as early as the seventeenth day, and in the feces at the end of the tenth. Formalin is very efficient.

Don't permit a sufferer from glau-

coma to go blind, thinking that a cataract is becoming "ripe." Use eserin ½ to 2 per cent.—not atropin.

Don't ignore the pathognomonic value of Konig's sign in cerebro-spinal fever.

Don't forget that almost all chronic inflammatory conditions of the face in children are eczematous.

Don't fail to examine the urine in all cases of persistent vomiting. This symptom is many times an early prodrome of uremia.

Don't make a diagnosis by the early cutaneous manifestations in children. Take all of the general symptoms into consideration.

Don't operate on your cases of tic douloureux before pushing strychnine and aconitin to their full physiological limit.

Don't express surprise when you find no glandular involvements in rodent (Jacobi's) ulcer.

Don't hesitate to use the gelatin dressing in non-exudative eczema. Results are gratifying when properly applied.

Don't give potaisia iodidi until indicated in syphilis.

Don't neglect atropin in the treatment of iritis.

Don't think of leaving your enteric case without percussing the bladder.

Don't fail to make frequent examinations in obscure abdominal cases. The second examination may reveal a floating kidney.

Don't tap a cystic goiter.

Don't trust pain as pathognomonic of malignancy.

Don't be guilty of poulticing a palpar abscess. Give ether, make a free incision, evacuate the pus, drain and use wet dressings.

Don't neglect to examine the urin in all cases of gangrene.

Don't forget that acetanilid renders a person more susceptible to "catching" cold.

Don't forget the "hysterical knee." All cases are not synovitis, arthritis, etc.

Don't be in too much of a hurry to tell your female patient that she has a floating kidney.

Don't keep an epileptic on any one treatment for any length of time.

Don't wait for tubercular glands to suppurate before removing.

Don't forget that pitting on pressure is a valuable sign in periostitis of tibia.

Don't overlook coxalgia in its incipiency.

Don't open a retro-pharyngeal abscess through the mouth.

Don't use pins, but silk-worm gut, in operating for hare lip.

Don't permit a man to administer chloroform who is accustomed to giving ether.

Don't forget massage in the treatment of your fractures.

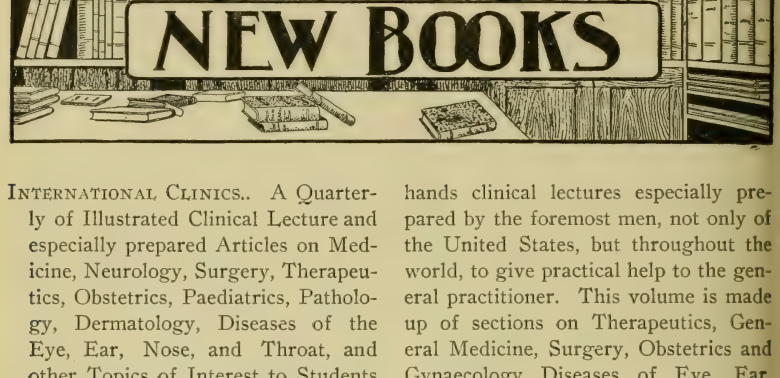
Don't operate cerebral cases in the Trendelenburg position. Hemorrhage is too severe.

Don't stop for hemorrhage when operating on goiter.

Don't forget that 83 per cent. of all mammary tumors are carcinomatous.

Don't use digitalis as a "cure all" in cardiac cases. Examine your patient carefully before giving a heart stimulant.

Don't expect results from the use of strong irritating applications in eczema. Your success in its treatment rests alone upon the use of mild, non-irritating lotions. It is doubtful if constitutional treatment does good, unless there be marked debility.—*Med. World.*



International Clinics.. A Quarterly of Illustrated Clinical Lecture and especially prepared Articles on Medicine, Neurology, Surgery, Therapeutics, Obstetrics, Paediatrics, Pathology, Dermatology, Diseases of the Eye, Ear, Nose, and Throat, and other Topics of Interest to Students and Practitioners by leading Members of the Medical Profession throughout the World. Edited by Henry W. Cattell, A. M., M. D., Philadelphia, U. S .A., with the Collaboration of John B. Murphy, M. D., Chicago; Alexander D. Blackader, M. D., Montreal; H. C. Wood, M. D., Philadelphia; T. M. Rotch, M. D., Boston; E. Landolt, M. D., Paris; Thomas G. Morton, M. D., Philadelphia; James J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh, and John Harold, M. D., London, with Regular Correspondents in Montreal, London, Paris, Leipsic, and Vienna. J. B. Lippincott Company, Philadelphia and London. Cloth, $2.00. Volume 3. Series 12th.

We always take especial pleasure in reading the International Clinics because these volumes are, as stated by publishers, not a review or in any way clippings from the journals, but first hands clinical lectures especially prepared by the foremost men, not only of the United States, but throughout the world, to give practical help to the general practitioner. This volume is made up of sections on Therapeutics, General Medicine, Surgery, Obstetrics and Gynaecology, Diseases of Eye, Ear, and Throat, and the valuable matter in either of these sections is well worth the price of the book. The special article on "The Function of the Digestive Glands, Based on the Researches of Pavlof and His Pupils," pushes forward our knowledge in this field of investigation and lays the foundation for further advancement in this department of physiological research. The second special article, "A Critical Study of the Theory of Inflammation," by Hans Schmans, is an able resume and the author maintains that according to his theory of this process the view of the theorist and clinician are made to coincide. The typographical make-up is all that could be desired.

The Principles and Practice of Gynecology. For Students and Practitioners. By E. C. Dudley, A. M., M. D., Professor of Gynecology, Northwestern University Medical

School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago; Fellow of the American Gynecological Association; Corresponding Member of the Sciete Obstetricale et Gynecologique de Paris; Fellow of the British Gynecological Society; one of the Founders of the Congres Periodique international de Gynecologie et D'obstetrique; Ex-President of the Chicago Gynecological Society. Third Edition, Revised and Enlarged, with 474 Illustration, of which 60 are in Colors and 22 Full-page Plates in Colors and Monochrome. Lea Brothers & Co., Philadelphia and New York, 1902.

The author states in his preface that his purpose in writing this volume is to present a practical treatise on Gynecology and to preserve as far as possible the unity of each pathological process as it may consecutively affect the different pelvic organs, by a division of subjects, especially inflammation, not on a basis of usual chapters, each describing the diverse of a special organ, but rather by a division made from the standpoint of pathological and etiological sequence. Thus for instance, the student would have a more rational and comprehensive idea of metrites by associating it with vulvovaginitis, salpingitis, oraritis, and peritonitis than by regarding it as an independent lesion. The author has adhered closely to his purpose and in this respect his work is superior to others presenting the same subject which are before the medical public at the present time. In selecting the plastic operation on the peroneum, vagina and corvex utero, he omits the impractical and confusing ones, giving those which admit of every day application. Likewise he discards the multiplicity of instruments of many present day operators and employs chiefly the simpler ones of the early gynaecologist. In this edition he has rewritten, rearranged and condensed many of the chapters of former editions, thereby obtaining space for nearly one hundred pages of new matter. Obsolete illustrations have been thrown out and replaced by newer ones. Many of the major and minor operations are illustrated by new drawings showing each manipulation step by step. For instance Hystro-myornectomy is shown by twelve consecutive steps vaginal hysterectomy by fifteen drawings. No one interested in gynaecology will make an error by reading this revised edition.

Progressive Medicine. A Quarterly Digest of New Methods, Discoveries and Improvements in the Medical and Surgical Sciences by Eminent Authorities. Edited by Dr. Hobart Amory Hare. In four abundantly illustrated, cloth bound, octavo volumes of 400-500 pages each, issued quarterly, commencing with March each year. Per annum (4 volumes), $10.00, delivered.

We receive with pleasure each volume of Progressive Medicine. Of those worthy publications which endeavor to place before the profession at stated intervals in a concise form the best that appears in the medical literature of the world, this is one of the best. It is a great time-saver to busy practitioners and should receive the patronage of every physician who desires to keep in touch with his profession. The contributors to Vol. III, September, 1902, are those learned and versatile writers, William Ewart, William S. Gottheil, Richard C. Norris and William Spiller and embraced therein are

the following subjects: "Diseases of the Thorax and Its Viscera, Including the Heart, Lungs and Blood Vessels, Dermatology and Syphilis, Diseases of the Nervous System and Obstetrics." The subject matter although derived from varied sources is well blended, comprehensive and skillfully presented. Binding, type, and paper are first-class in every way.

THE PUBLIC AND THE DOCTOR. By A. Regular Physician. Published by Dr. B. E. Hadra, Dallas, Texas.

This booklet of 150 pages, presents in a clear-running and forceful way the relative merits and demerits of the regular or Allopathic, the Homeopathic schools of medicine, Christian Science and Osteopathy. It also discusses the family physician, the specialist and their true relationship to each other and the public; the correct conduct of the physician and the laity during consultations; the last chapter deals with business relations between doctors and patients and is to be especially commended to the profession and should be read by every one who has occasion to employ a physician. This little volume deserves a wide circulation.

HELEN KELLER AND DR. HALE.—My intimacy with Helen Keller, says Dr. Edward Everett Hale in *The Outlook*, began the first time I ever saw her; she was a sweet little girl of seven. At that time, and for many years after, she lived in the charming belief that everybody loves everybody; everybody had always loved her, and she did love everybody. She has always been singularly graceful in her movements. When she was a child this grace showed itself in ways not then restricted by the conventionalities of later life. She ran across the room and sprang into your arms, really supposing that was the way in which people always greeted each other.

Poor staid Laura Bridgman, who had been brought up in all the conventionalities of the most rigid New England propriety, used to say that Helen was crazy. It was the craziness of sweet, natural love.

I am an Everett on my mother's side, and she is an Everett on her great-grandmother's side, so we have always called each other cousin. As soon as she came to Boston it was a pleasure to me to ask her to meet some other little girls of her own age at my house. As Helen came in with her dear teacher, Miss Sullivan, Miss Sullivan led her to a freestone statue of the god Terminus, which stands at the end of the piazza. It is an old relic of Egypt. Helen had then never "seen" any statue, and she felt of this rough, banged-up little god, two thousand years old, and at once, in Miss Sullivan's hand, spelled out the words, "What an ugly old man!" We brought her into the house, and after a few minutes I led her to a charming little marble tablet by the sculptor Bernini, which represents in alto-relievo the Saviour and John the Baptist as boys playing. Helen felt of their faces, and bent over at once and kissed them both. This was the beginning of her delight in sculpture.

Don't forget that high temperature prevents digitalis from slowing the pulse.

Don't listen to the man who tells you he never had a laceration. Examine the pelvic floor carefully after delivery, and repair any tear, no matter how small, if circumstances will permit.

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THERAPEUTIC HINTS.

Bronchitis and Rhinitis.

H. C. Howard, of Champaign, Ill., recommends the following antiseptic combination in the treatment of different affections of the bronchial passages:

℞	Formalin	ʒ ii	8
	Spts chloroformi	ʒ i	4
	Alcoholis	ʒ i	30
	Ol. geranii	m. xx	1 | 30

M. Sig.: To be dropped on absorbent cotton and inhaled several times a day. This may be carried around in one's pocket in a small tin box containing absorbant cotton saturated with the solution, as recently suggested by the Chicago Department of Health. The effects of the formalin on the mucous membranes can be quickly detected, and its antiseptic value can not be doubted.

Infantile Bronchitis.

Debove, in *Prog. Medical,* recommends the following:

℞	Syr. lactucarii	ʒ v	20
	Syr. adianti		
	Syr. papaveris (poppy) aa	ʒ iss	45

M. Sig.: From four to six teaspoonfuls daily; or:

℞	Syr. lactucarii	ʒ v	20
	Syr. belladonnæ		
	Syr. aurantii flor., āā	ʒ ii	8
	Syr. tolutani	ʒ i	30

M. Sig.: From four to six teaspoonfuls daily.

Chronic Bronchitis.

The following combination is recommended by E. Fletcher Ingals to relieve the cough in chronic bronchitis when opiates are not contra-indicated:

℞	Morph. sulph	gr i	06
	Ammon. carb	gr. xxx-xl	2-2 | 65
	Syr. pruni virg		
	Mist. glycyrrhizæ comp., āā	drachm iv	16

M. Sig.: One teaspoonful in water to relieve the cough; or:

℞	Terpin hydratis	gr. ii	12
	Ext cannabis ind	gr. 1-20	003
	Codeinæ	gr. 1-8	008
	Ol. menth pip	gtt. ss	03
	Sacchari albi	gr. iii	20

M. Fa. capsula No. i. Sig.: One every four hours until the cough is relieved.

Pneumonia.

E. Aufecht, in *Nothnagel's Encys. of Med.,* states that he uses quinin and iron in every case. For adults he prescribes the following:

℞	Quininæ hydrochlor	gr. xv	1
	Ferri sulph	gr. xlv	3
	Pulv. glycyrrhizæ rad	gr. lii	3 | 50

M. Ft. capsulae No. xl. Sig.: Two capsules twice a day. For children he recommends the following:

℞	Quininæ hydrochlor		
	Ferri sulph, āā	gr. xxii	1 | 5
	Pulv. glycyrrhizæ	gr. xv	1
	Ext. glycyrrhizæ	q. s.	

M. Ft. pil. No. xxx. Sig.: Take two or three pills daily, according to age—*Jour. A. M. A.*

Hemorrhage from the Nose or Throat.

The following combination is of great service in checking severe forms of epistaxis either from eroded vessels when the cartilaginous portion is destroyed or following operations on the nose or throat:

℞	Acidi tannici	ʒ iv	16
	Acidi gallici	ʒ iii	12
	Glycerini	ʒ ii	8
	Aq. destil	ʒ i	30

M. Sig.: To be used locally by means of a swab or saturate a piece of sterilized guaze and introduce into the nares anteriorly or through the nasopharynx.

What Is It *and* What Can It Do?

A Liquid Beef Tonic, including beef, iron, cinchona and brandy as its chief therapeutic constituents, may reasonably be regarded as capable of 'doing' a great deal. Let us form our opinion by considering separately its ingredients:

"*Meat Juice* is a valuable preparation when a powerful stimulation is required and the digestive forces are exceedingly weak."
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"That *Iron* performs a very important office is shown in the rapid construction of red blood-globules when administered in anæmia. It feeds to the blood a food which it needs."
ROBERTS BARTHOLOW.

"*Cinchona* differs from other stimulants in the duration of its action, which is long-sustained and entitles it to be called a 'tonic-stimulant.'"
ALFRED STILLÉ.

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W. GILMAN THOMPSON.

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Samples sent free, on application, to physicians.

MEDICAL NEWS AND ITEMS.

The typhoid epidemic in Chicago is now practically at an end.

Four hundred of the 1,000 students attending the University of McGill this year are studying medicine.

A tablet has been erected in Faviero, France, to Dr. Liebeault, the creator of the Nancy School of Hypnotic Therapeutics.

Much apprehension has been caused by the persistence of the plague in Odessa and other towns in the southern part of Russia.

A tuberculosis commission has been recently appointed by the governor of Maryland, which will inquire into the causes and spread of consumption in that city.

The death of Dr. Barend Joseph Stokis, of Amsterdam, professor first of pathology, and later of pharmacology, in the University of Amsterdam, took place recently.

The Northwestern University has purchased the Tremont House hotel, an old landmark in Chicago, and will use it for its schools of law, dentistry, and pharmacy.

The ever increasing business of Sharp & Dohme has forced them to open a depot for the convenience of their Western trade at 119 South 4th street, St. Louis.

Nine other cases are pending, in which damages are demanded aggregating $72,000. The jury held that Dr. Ravold alone was responsible for the death of the child.

London has 6,500 beds for the treatment of infectious diseases, or one bed for each thousand of population. New York City has only 750 such beds, or one for each five thousand.

There was recently organized at Burlington, Vermont, by a number of physicians and laymen, an association under the name of the Vermont Society for the Study and Prevention of Tuberculosis.

A number of prominent physicians of Washington, D. C., among whom is Surgeon-General Sternberg, U. S. A., retired, have taken steps toward the formation of a post-graduate medical school in that city.

Recently a court of special sessions in New York City fined a clergyman for practicing medicine without a license. The minister was secretary of a company called the Interdenominational Committee for the suppression of the drug habit.

Plans have been completed for a new hospital for sick deaf mutes of New York City. The hospital will be built on the grounds of the New York institution for the instruction of the deaf and dumb, and will cost in the neighborhood of $100,000.

A Verdict for Damages Because of Impure Anto Toxin.—A jury in Judge Spencer's court awarded Jacob Ernst $1,000 damages against Dr. Amand Ravold, formerly city bacteriologist, for the death of Mr. Ernst's daughter, May, who died from tetanus after having been inoculated with diphtheria antitoxine provided by the city.

Surgeon-General Wyman in a recent interview made the following statement: "I do not believe that there is more disease this year than usual. The

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Whooping Cough, Croup, Asthma, Coughs, Colds, Catarrh, Bronchitis, Grippe.

An antiseptic, antispasmodic and prophylactic, to be vaporized for the treatment of **Whooping Cough, Croup, Bronchitis, Asthma, Diphtheria** and kindred diseases of the throat and air passages.

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fference is that in these days of rapid ansmission of news we hear more of e ills of our distant neighbors than rmerly, which makes it appear that e world is in the grasp of pestilence. e now hear almost instantly of an tbreak of a scourge where formerly would be silence."

The Departure of a Popular Physician.—Dr. J. C. Walton, one of the best known physicians of Reidsville, will leave for Chase City, Va., where he will take charge of the sanitorium that is to be a part of the new hotel, the Mecklenburg. The hotel was built by a lot of capitalists, among whom are Mr. B. N. Duke, of Durham. Dr. Walton gives up an excellent practice to take

the new position and leaves behind him a host of friends in this State.— *Charlotte Observer.*

A Berlin physician, probably a sufferer himself, says an exchange, has announced that a tendency to redness of the nose, due to fugitive erythema, either from internal or external causes, may be cured by benzine applications. He applies the benzine on a folded piece of lint, kept upon the erythematous area a few seconds without causing friction. When this is repeated a few times the skin covering the nose becomes paler and less shiny. Applications of benzine may also be made prophylactically.

Dr. Harry Friedenwald has been named by the faculty of the College of Physicians and Surgeons as the successor of his father, the late Dr. Aaron Friedenwald, in the chair of eye and ear diseases. Dr. Friedendald is a graduate of the college and was resident physician of the City Hospital sixteen years ago. He then went abroad for a course of study and for the past twelve years has been in active practice in this city and an instructor in the college. For sometimes he has been associate professor of diseases of the eye and ear.

The London Medical School for Women reports a steady progress for the past year, says an exchange. At the annual distributions of prizes which took place recently a scholarship of £60 a year was given by the governors of the endowed charities of St. Dunstan's-in-the-East. Other scholarships of equal and some of greater value were also assigned. A due proportion of the students passed the examinations, and a number have accepted important appointments not only in England but in other countries. Two new appointments of resident surgeon and physician in the Royal Free Hospital have been filled by women, and a large number of old students have received public appointments during the year.

Surgeon-General Forward has, according to an exchange, received recent advices that dysentery, which heretofore has caused more sickness and deaths than any other disease among the troops in the Philippines, has practically disappeared. It has succumbed to the strenuous efforts of the medical department for its eradication. Strict sanitary measures have been enforced, including the boiling of all drinking water, and rules for bathing, and particularly the washing of hands before handling food. Another source of great satisfaction to the medical department is the eradication of a tropical skin disease commonly called "dhobie itch." This disease, while not fatal, was considered almost in the nature of a scourge among the troops in the islands.

Monument for Rudolph Virchow.— The German committee in charge of the celebration in honor of Rudolph Virchow's eightieth birthday—Prof. Waldeyer chairman, Prof. Posner secretary—has begun collecting funds for the purpose of erecting a monument in memory of that great and unique man and physician. The undersigned are anxious and ready to receive contributions which will be duly acknowledged: Frank Billings, President of the American Medical Association, 100 State St., Chicago, Ill.; Thomas D. Coleman, 505 Greene St., Augusta, Ga.; A. Jacobi, 19 East 47th St., New York City; W. W. Keen, President of the Congress of American Physicians and Surgeons,

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ough fact and fiction. It is now, and will be increasingly,

A MAGAZINE OF LIFE.

A mere hint of part of the year's programme is given below:

UE STORIES OF IMPORTANT EVENTS. There is always an "inside" to a nota-
ble occurrence; and it is almost invariably a story of intense human interest.

The True Story of the Organization of the Steel Trust.

The True Story of How Theodore Roosevelt Became President.

The True Story of the First Railroad Merger.

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The Autobiography of an Insurance Agent, who must know human nature intimately.

The Autobiography of a Bank Cashier, who uses keen insight into the ways of borrowers.

The Autobiography of a Naval Officer, who regards civil life as a lower order of existence.

The Autobiography of a Member of Congress, who reveals many things that are seldom told.

BLOWING OF AN OIL BUBBLE. By S. MACREYNOLDS. Exposing the methods of promotion sharks," who victimize the public with stock in ionary oil wells.

RIES OF STRENUOUS LIVES. The true stories men whose personal feats outdo the exploits of roes of romance.

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URE STUDIES. By Prof. J. M. COULTER, of the iversity of Chicago; A. R. DUGMORE, H. C. RWIN and others. Being intimate observaes of nature from the scientific, pictorial and ture-loving point of view.

E LEO XIII. By F. MARION CRAWFORD, the ll-known novelist who is the official biogra-er of the Pope, and has unusual opportunities acquiring a knowledge of his career.

NEW YORK THE MOST INTERESTING PLACE IN THE WORLD. A series of illustrated articles explaining the great forces at work which destine New York to be the coming capital of the world.

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The Webster-Hayne Debate.

Critical Days in Great Careers.

The Fall of Richmond.

WOMEN'S SPORTS. By Miss ANNA WHELAN BETTS.

FICTION. *Everybody's Magazine* has secured for the coming year stories by some of the brightest, most original writers of the present day, prominent among whom are the following: MARY E. WILKINS HOLMAN, F. D. Y. JUSTUS MILES FORMAN, WILLIAM BULFIN, SYDNEY PORTER, W. R. LIGHTON, and many other old favorites as well as many new writers who are rapidly forging to the front in the field of literature. Among the stories that will appear during the year are: "The Way of the Wind," by the author of "A Modern Antæus;" "Vashti" by G. M. Baxter; "An Unconvicted Convict," by R. C. McCants; "The Rapier of Ferarra, by Atherton Brownell; "The Place of Dragons," by Ella W. Peatie; "The Captain," by Maxamilian Foster; "The Wheel of the Potter," by Herman Whitaker; and "The Needle of the Damned," by Justus Miles Forman.

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See Club Offers on Next Page.

"A physician can afford to be indifferent regarding the accurate filling of his prescriptions."

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In a paper read before the Paris Academy of Medicine, Dr. Solners seeks to establish, says *American Medicine,* a correlation between the increase of insanity and the dissemination of knowledge. According to his theory, which is plausibly built on close observation of numerous incidents, education acts upon certain brains in such a way as to produce cerebral disorders. In fact, even the superficial knowledge as imparted in the lower schools or absorbed from newspapers is considered sufficient to cause minor crevices in the gray matter, giving rise to many forms of insanity not as yet catalogued. For illustration he cites a list of abnormal happenings in a single week together with many other instances, from which he deduces that the human race is chiefly composed of latent lunatics.

A Dangerous Swindler.—For nearly a year past, many of the doctors and dentists of this country have been victimized by a very clever swindler who has passed under several aliases, among them R. G. Stearns, R. L. Nelson, and others. He claims to represent The Success Company, publishers of the Success magazine, and takes orders for numerous magazines comprised in the Success Clubbing Offers. He works very rapidly, jumping from town to town, and always among doctors and dentists. All the money he obtains is appropriated, and the magazines are never ordered or received. Every effort has been made by the Success Company to apprehend this swindler, but so far without success. The Success Company requests us to notify all doctors and dentists that its representatives always bear a special dated card of introduction, and to patronize no others. It also offers a reward of $50 for any information which will lead to the apprehension of this swindler. He is described as follows: From 23 to 25 years old; 5 feet 9 inches in height; medium build; weight about 150 pounds; dark hair (almost black) of medium length, very curly about the temples; dark gray eyes (almost hazel); rather sallow complexion, with scattered dark brown freckles; face unusually round for man of so light build; clothes not shabby, but far from new, and much worn. Black coat and vest, gray trousers (hard twisted goods), with small stripe; black derby hat, much worn; old style turndown collar, with made tie. General untidy appearance for a man in the soliciting business.

Practical Philanthropy.

The recent gift of $4,000,000 by John M. Burke, of New York, to be used to aid convalescents after being discharged from hospitals until they can care for themselves, is a fine example of practical philanthropy. No class of men see more than do physicians of the need of a fund for just such persons. Many and pitiful cases are seen almost daily by medical men. Oftentimes the breadwinner of a family finds upon his discharge from a hospital, where he may have lain for weeks with typhoid fever or a fractured limb, that his small store of savings is exhausted, and that he has not the strength nor energy to take up his usual occupation. To such as these it is intended that the interest of his great sum shall be given, and no one needs help any more than does an individual who finds himself in such a position.—*Med. Age.*

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THE CAROLINA MEDICAL JOURNAL.

Charlotte, North Carolina.

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Newer Materia Medica.

The Value of Gude's Pepto-Mangan in Anæmia.

By Dr. Enrique Diago, Havana, Superintendent of Hospital No. 1, Havana, Cuba, and Dr. Jose F. Benitez, Havana, Chief of the Laboratory, Hospital No. 1, Havana, Cuba. Translated from the "Progreso Medico," Havana, April, 1902.

Anaema is a very common disease in this country (Cuba) and consequently one against which the physician is often obliged to contend in the practice of his art. While the use of the ordinary iiron preparations often give all the effects that could be desired, yet it usually produces a condition which may be regarded as a secondary disease—constipation. In looking about for a preparation which would not present this very serious disadvantage, which cannot always be counteracted by the coincident administrations of laxatives, we came across Gude's Pepto-Mangan, which, according to the published statements of many clinicians, seemed to us a remedy worth trial in a large series of cases. Accordingly, we obtained a sufficient supply of this preparation for our hospital, and began to treat all our cases of anaemia, in which iron was indicated, with Gude's Pepto-Mangan.

In presenting now the results of our observations with this pharmaceutical compound, we may say at once that our expectations were more than realized, when we noted its efficiency in combating the disease, and its perfect palatability and freedom from constipating after effects.

One of us, Dr. Benitez, chief of the laboratory of the hospital, undertook the task of keeping minute records of all the cases observed, including a record of the amount of haemoglobin and of the number of the red blood cells, both before and after the treatment. For the purpose of illustration, we relate briefly six cases, which show conclusively the effects of Gude's Pepto-Mangan on persons with anaemia, and prove without doubt that the administration of this remedy is connected with none of the disadvantages and discomforts attending the use of the ordinary preparations of iron.

Case 1.—N. G., aged 26 years, was admitted to the hospital, suffering from loss of nutrition, emaciation, pallor of the skin and mucous membranes, loss of memory, anorexia, mental depression—in a word, from all the typical symptoms of anaemia. This condition was traced in his case to a chronic malaria, from which the patient had been suffering for a long time. The patient weighed only 102 pounds at the time of admission.

Pepto-Mangan (Gude) was given in doses of two tablespoonfuls twice daily, at breakfast and at dinner respectively, with some cinchona wine. The first blood examination showed 2,400,000 red blood corpuscles c. m., by the Thoma-Zeiss method. Ten days after the beginning of the treatment, this patient, who had been so extremely pale

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Grains per U. S. Gallon, 231 cubic inches.

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Magnesium Sulphate	7.33524	Sulphuric Acid	(SO3)	56 94360
Calcium Sulphate	25.71113	Sulphurous Acid	(SO2)	.08514
Strontium Sulphate	.73481	Chlorine	(Cl)	7.07743
Potassium Sulphate	1.17191	Iodine	(I)	.00105
Sodium Sulphate	64 04838	Bromine	(Br)	trace.
Sodium Hyposulphate	.11663	Fluorine	(Fl)	.04665
Magnesium Carbonate	.50153	Phosphoric Acid	(P2O5)	.04845
Calcium Carbonate	5.08299	Nitric Acid	(NO3)	.41406
Strontium Carbonate	.13413	Carbonic Acid	(CO2)	6.60976
Iron (ferrous) Carbonate	.39615	Lime	(CaO)	13 43569
Lithium Chloride	.01399	Strontia	(SrO)	.51319
Sodium Chloride	11.68057	Magnesia	(MgO)	2.77594
Sodium Bromide traces	——	Iron	(FeO)	.24669
Sodium Iodide	.00122	Potash	(K2O)	.63333
Sodium Arsenate	.00198	Soda	(Na2O)	34.17817
Calcium Fluoride	.0 564	Lithium	(Li)	.00234
Calcium Phosphate	.01168	Alumina	(Al2O3)	.03409
Magnesium Nitrate	.49512	Silica	(SiO2)	.67648
Alumina	.03499			123.68326
Silicic Acid	.67648			
Carbon dioxide, combined with Mono-Carbonates	2.68321			
	120.92846			

In general terms I would place this water under the purgative water; this class embraces the celebrated water of Pullna, Bohemia, Friedrichshall, Germany, and Carlsbad, Bohemia, though your water is considerably milder in its action than either of the above waters and *I think on that account preferable.*

This shows a complete analysis of Vade Mecum Mineral Water made by me.

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when he entered, began to improve as regards the color of his cheeks and general appearance. His general well-being was so marked that he spoke with pleasure of the marked improvement in his condition which had taken place since he had been taking the new remedy at our hospital. In these ten days he gained five pounds in weight and was able to walk around the ward without the lassitude which he had felt when he was admitted. The blood was examined a second time, showing an increase of 300,000 red blood cells. The patient was discharged cured after fifty days' treatment, weighing 130 pounds and with a blood-count indicating 2,800,000 red blood cells c. m.

CASE 2.—Mrs. C. D., aged 34 years, who gave a history of miscarriage, was admitted with the symptoms of anaemia, secondary to the loss of blood occasioned by the accident mentioned. The chief symptoms were emaciation, loss of strength, and gastrointestinal disturbances. She weighed only 90 pounds when she entered the hospital, and her blood showed a marked diminution in the amount of haemoglobin, and only 2,300,000 red blood cells to the cubic millimetre.

Gude's Pepto-Mangan was prescribed in the same doses as in the preceding case, and all went well until the 10th day, when the patient of her own accord, in order to facilitate the cure, and to accelerate the recovery, took five tablespoonfuls of the preparation during the day, causing a slight disorder of the stomach. The administration of Pepto-Mangan was thereupon discontinued, and tablets of bismuth and salol, together with a purgative were given. Five days later, the Pepto-Mangan was resumed, at first in doses of two teaspoonfuls, and two days later in doses of two tablespoonfuls. The further course of the treatment went on without any mishap, and the patient recovered completely. On leaving the hospital the haemoglobin was found normal, and the number of red blood cells was found to have increased to 3,500,000 c. m., while the patient's weight had increased 21 pounds within fifty days.

CASE 3.—Mr. M. D., aged 26 years, who had suffered during the preceding month from an attack of acute articular rheumatism involving a number of joints, entered the hospital complaining of the symptoms of anaemia. He had the appearance of a convalescent with pale skin and mucous membranes, fatigue in walking, emaciation, etc. There was œdema about the ankles, but no valvular lesion in the heart, and there were in addition, absence of appetite, insomnia, functional depression of the genital apparatus, and dyspepsia. The patient weighed only 92 pounds, and his blood when examined showed a decrease in the amount of haemoglobin and only 2,500,000 red blood cells c. m. At the end of fifteen days' treatment, which consisted of the administration of two tablespoonfuls of Pepto-Mangan (Gude) at breakfast, of the same amount at dinner and of an additional tablespoonful at noon, the patient had gained a great deal of strength, his pallor had almost disappeared, the haemoglobin had increased and reached its normal quantity, and the red blood cells had increased to 3,200,000 c. m. The patient was therefore discharged completely cured at the end of forty days after admission.

CASE 4.—Mr. R. G., aged 42 years, who did not show any signs of organic disease, and who presented no characteristics of a gouty or lithaemic dia-

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thesis, was admitted to the hospital in a greatly disturbed state of mind on account of attack of vertigo, palpitation of the heart, extreme weakness, and various erratic pains in the muscles. He gave a history of a recent attack of influenza, during which his nervous symptoms had become intensified. He had not had a very marked rise of temperature, and the respiratory passages were scarcely affected during this attack, but there were severe pains in the back and joints, and an intense headache. The examination of the blood showed the presence of 3,000,000 red blood cells c. m., and the patient was found to weight only 110 pounds.

He was placed exclusively on Pepto-Mangan (Gude) treatment. Twenty days later, the pains had ceased; he ate well; his weight had increased to the extent of four pounds, and the red blood corpuscles had increased in number by 200,000. Thirty days after admission he was discharged cured.

Case 5.—Miss C. P., aged 16 years, was admitted to the hospital with a very pale skin and a deficient muscular and adipose development. Her menstruation had become irregular, and she had suffered from various nervous disturbances. Her growth had not kept in harmony with her nutrition, and she presented the characteristics of chloroanaemia, as frequently seen in Cuban girls—namely, accompanied by a series of neurasthenic symptoms. She weighed only 87 pounds, and the blood-count showed only 1,800,000 red blood corpuscles c. m. After ten days' treatment, the number of red blood corpuscles increased by 200,000, and the weight of the patient by three pounds. Twenty-six days after admission, she was removed from the hospital by her relatives, and on discharge her weigl was 94 pounds.

Case 6.—Mr. G. F., aged 38, whos previous history was negative, and wh had not suffered from any severe il ness shortly before admission, entere complaining of loss of flesh an strength, decrease of normal weigl and extraordinary fatigue after h usual work. He attributed these symp toms to transgression of hygienic rule The first blood examination showe 2,600,000 red blood cells c. m. Hhe pa tient weighed 106 pounds on admissio Thirty-six days later, after having bee under treatment with Pepto-Manga (Gude) during the entire period, h was discharged at his own request. H had increased eleven pounds in weigl and his red corpuscles numbered 2,850 000 c. m. (an increase of 250,000). H went back to his usual work witho experiencing and unusual fatigue.

To sum up the results obtained wit the employment of Pepto-Manga (Gude) in the treatment of anaemia we may say conscientiously, that it i the best remedy we know of for thi purpose, and that we do not hesitat to commend it to the medical profes sion at large, and especially to our con freres in Cuba, as an iron preparatio that possesses all the advantages tha can be demanded of such a remedy an none of the disadvantages that ar characteristic of other iron prepara tions. We would especially emphasiz also that Pepto-Mangan (Gude) i very pleasant to the taste, and is mos easily taken by patients of all ages an with the most delicate digestions.

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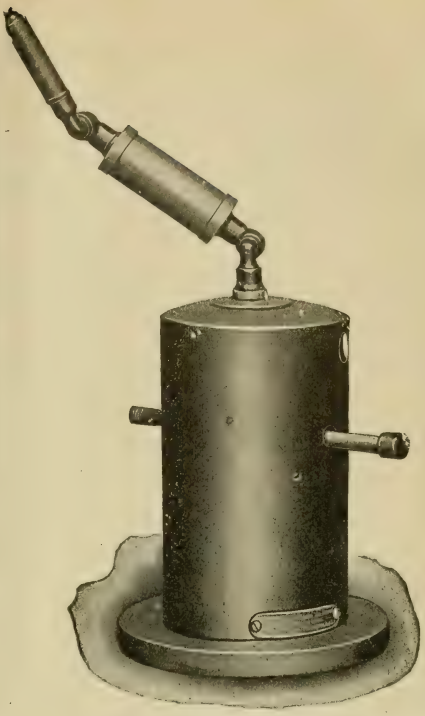

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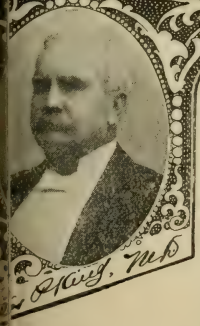

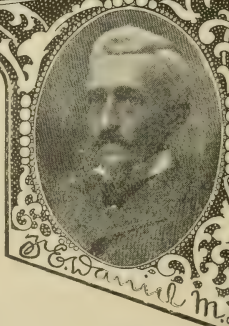

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among those of the more mighty class who must go because their neighbors can—there are exacting strains incidental to the summer flitting, that often are not manifest until nervous tension is relaxed when the subject is presumably settled for rest and repair. The hopeful for recuperation does not come, for the rush and bustle of travel has left a system nervously depressed from fatigue, and impressionable to the unhygienic conditions often manifest during the heated term. The practitioner, who is called to aid such nerveless patients, is often at his wit's end for a remedy that shall be agreeable and speedily effective. Such a system does not require an artificial stimulus of drugging, but some aid to repair. This repair is impossible where the human machine is clogged with the products of tissue waste. Of all known substances to promote a conversion of this waste, there is none equal to Coca, which may rightly be termed a panacea for the ills of overtired humanity.

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In the course of the second year there comes a time when the milk diet begins to be insufficient for the growing child, and nature calls for a change, while yet the system is in many cases unprepared for solid food. This kind of deadlock results in diarrhœa or constipation, anaemia, restlessness, fretfulness, etc. In such cases the fit and radical remedy will be found in the administration of say ten drops of bovinine in a little milk, at intervals of three hours.

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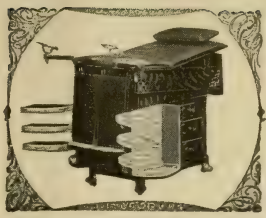
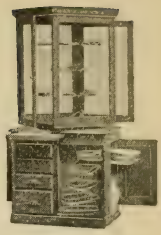

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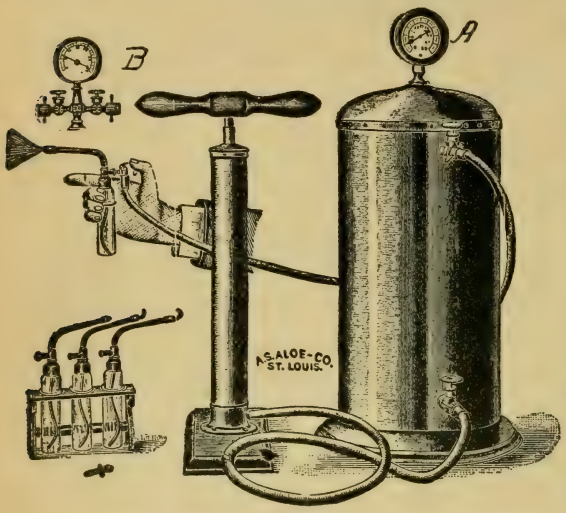

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